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RCH - APRIL, 1961 White Number 281

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# ROCKS and MINERALS

PETER ZODAC, Editor and

America's Oldest and Most Versatile Magazine for the Mineralogist, Geolegist, Lapidary.

**Published Bi-Monthly** 





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Lanidary Societies

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2nd HEART OF CONN. GEM AND MINERAL SHOW, JULY 15-16, 1961
NEW GEM SCOOP
COVINGTON LAPIDARY ENGINEERING CORP AWARDS
PRIZE AND PLAOUE

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# CHIPS FROM THE QUARRY



#### SNAPPED IN SANTA CRUZ, CALIF.

The above two collectors were snapped examining minerals, Tues. Nov. 29, 1960, in the home of Al Thrower (P. O. Box 305), Santa Cruz, Calif. The goodlooking fellow on the right is Mr. Thrower, but who do you suppose is the old man on the left? We will give you 3 guesses and most of you will be wrong.

Photo taken by Miss Lillian Thrower.

The collector on the left is the Editor of R&M. Mr. Thrower lured the Editor with the offer of a wonderful meal, the privilege of examining some intensely interesting minerals, and the opportunity of viewing some fascinating movies which he and his daughter had taken in Europe some few months ago.

Editor's Note:— The Editor was in California visiting relatives in Long Beach and Sacramento and thus it was most convenient to include Santa Cruz in his itinerary. The visit with the Throwers was a most enjoyable one and will never be forgotten. Everything went off smoothly, why even the weather was nice. Al and his daughter, Lillian, are two of the nicest people and what a blessing to mineralogy that we have them on our side—P. Zodac.

# PLANNING AN ARTICLE FOR R&M?

Send first for "Hints to writers for ROCKS AND MINERALS." Enclose a self-addressed stamped envelope with your request and "hints" will be sent free.

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California and Its Natural Resources. (16-mm. color, sound; 30 minutes; 7 pounds.) Produced in cooperation with Richfield Oil Corp.

This new all-color motion picture, a up-to-date version of a popular film distributed nationwide by the Bureau, illustrates the development and conservation of the State's mineral, water, land, and other resources. It depicts mining operations, irrigation projects, petroleum production, modern farming, and forestry practices, and includes scenes filmed at National State parks and amusement centers and shots of summer and winter sports.

Because of the large demand for the Bureau's films, distribution is limited to the United States.

#### PHOTO ON FRONT COVER

The photo on the front cover of this issue shows the likeness of a bunny rabbit in Montana agate. The rabbit is white with shades of yellow against a bluish-gray background. The agate was found about 17 miles northwest of Bridger, Carbon Co., Montana. It is in the collection of Greg and Gary Sokolowski, 1340 Lynn St., Erie, Penn. Greg and Gary are members of the Gem City Rock and Mineral Society, Erie, Penn.

# Coming Events

April 1-2; 8-9; 15-16; 22-23; 29-30, 1961—
Roundup Club Field Trips. These trips will make ideal outings for those who wish to collect palmwood, opalite, verd-antique, chapenite, and jasp-agate. For information contact the Secretary, Ben O. Morton, 21423 Hwy 66, RFD 1, Barstow, Calif.

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April 14, 15, 16, 1961 — The Central Nebraska Rock & Mineral Society will hold its 7th Annual Rock & Mineral Show at the National Guard Armory, 2015 W. 3rd St., Hastings, Nebr. For details contact the Secretary, Mrs. Pat Hill, 1230 N. California Ave., Hastings, Nebr.

April 15, 16, 1961 — Lincoln Orbit Earth Science Society, the Central Illinois Rock Club and the Siloam Springs Rock and Mineral Club will have an exhibit of gems and minerals in the Sangamon County Junior Fair Bldg., New Berlin, Ill. Public invited. For further information contact Mrs. C. R. Gibson, 1531 Jerome Ave., Springfield, Ill.

April 16-30, 1961 — The Grand Rapids Mineral Society will present its 2nd Annual Rock & Mineral Show at the Grand Rapids Public Museum, Grand Rapids, Mich. For details contact the Secretary, Jane Cichaniewicz, 809 Franklin St., S.E., Grand Rapids 7, Mich.

April 22, 23, 1961 — 8th Annual Show, Wichita Gem and Mineral Society, at the (east) National Guard Armory, 620 N. Edgemere St., Wichita, Kans. For further information contact Clarence M. Reaugh, 1733 Fairview Ave., Wichita 3, Kans.

April 30 to May 28, 1961—Berks Mineralogical Society will sponsor a mineral exhibit at the Reading Public Museum and Art Gallery, 500 Museum Road, Reading, Penn. Admission free.

May 12, 13, 14, 1961 — 3rd Annual Gem and Mineral Show sponsored by the Timpanogos Gem and Mineral Association will be held in the National Guard Armory, 230 W. 500 North, Provo, Utah. For further information contact Mrs. Ray F. Roberts, 392 West 1st North, Lehi, Utah.

June 2, 3, 4, 1961 — Rock Springs Gem & Mineral Club State Show will be held in the Sweetwater County Fair Bldg., north of Rock Springs, Wyo. For further information contact Mrs. Hans Peterson, 81 Pine, Rock Springs, Wyo.

June 3, 4, 1961 — The Grand Junction Gem & Mineral Club will hold its Annual show in the Lincoln Park Auditorium, Grand Junction, Colo. For details contact the Publicity Chairman, Donald F. Crain, Box 2, Grand Junction, Colo.

June 9-11, 1961 — Annual Show of the Rocky Mountain Federation of Mineralogical Societies in Casper, Wyo. Show Chairman is William Guthrie, 318 S. Fenway, Casper, Wyo.

June 10, 11, 1961 — The Estero Bay Gem & Mineral Club of Morro Bay, Calif., will hold its 2nd Annual Show at the Veterans Building, 9th St., Morro Bay, Calif. For details contact the Secretary, Mrs. C. A. Diebold, 2636 - 9th St., Rt. 1, Morro Bay, Calif.

June 24, 25, 1961 — Rollin' Rock Club Mineral Show (Eastern Seaboard) will be held at Onyx Cave, Berks County, Penn. For further information contact Mrs. H. Norman Michel, 579 Chestnut St., Kearny, N. J.

June 24, 25, 26, 1961 — California Federation of Mineralogical Societies, 22nd Annual Show. Los Angeles County Fairgrounds, Pomona, Calif.

June 29, 30, July 1, 2, 1961 — Midwest Federation 21st Annual Convention will be held at the Saginaw County Fair Grounds, Saginaw, Mich. For further information contact the General Chairman, Harry H. Sprague, 11307 Swan Creek Rd., Rt. 5, Saginaw, Mich.

July 15, 16, 1961 — 2nd Heart of Conn. Gem and Mineral Show, will be held in Moodus, Conn. For information contact Mrs. Robert P. Gallant, Box 32, Moodus, Conn.

Aug. 10, 11, 12, 13, 1961 — Eastern Federation of Mineralogical and Lapidary Societies and American Federation of Mineralogical Societies. Combined Convention and Show. Miami Municipal Auditorium. Gemcrafters of Miami, Florida, hosts.

Aug. 19, 20, 1961 — Denver Gem and Mineral Fair sponsored by the Colorado Mineral Society, will be held at the Jefferson County Fairgrounds, 15200 W. 6th Ave., Hwy 6 between Denver and Golden. For further information contact Muriel Colburn, 2821 S. Jackson St., Denver 10, Colo.

# AUSTRALIAN OPAL TOUR CANCELLED

Due to two unexpected operations, and on advice of my doctor, I regret to announce that the OPAL DIGGING TOUR TO AUSTRALIA, planned for July 1961, must be cancelled.

I wish to extend my thanks to the many people who wrote me and who were planning on making the trip. I regret this action must be taken ,but it was something I had not expected not planned. I know all of you will understand. Thank you.

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W. H. Walker "Opal Tours" 20385 Stanton Ave., Castro Valley, Calif.

# **COMING EVENTS (Continued)**

Oct. 6, 7, 8, 1961 — The Indiana Geology & Gem Society will be host to a Midwest Federation "Rockrama" to be held in the Agricultural Building at the Indiana State Fairgrounds, Indianapolis, Ind. For details contact the Publicity Chairman, Marvin R. Gatheridge, 3226 Broadway, Indianpolis 5, Ind.

DES MOINES '62' — The Des Moines Lapidary Society will be host to the Annual Convention of the National and Midwest Federations of Mineralogical Societies in 1962. Date and place will be announced later. For details contact the Secretary, Mrs. Virginia Hunt, 4145 - 4th St., Des Moines, Iowa.

# VISITING ROCKHOUNDS WELCOME

The following subscribers would be delighted to have rockhounds call on them when passing through their cities. If any one else wants his name added to the list, just let us know.

Bill & Alta Aulsebrook, 1/4 mile west of Hwy 7 on Lake Hamilton at the "Pretti Point" turn sign, Hot Springs, Ark.

J. J Brown, Rt. 1, Box 202, Benton, Ark.

Benton, Ark. John & Clara Roder, Hwy 7 North, 6 miles from downtown Hot Springs, Ark.

Mr. & Mrs. Howard Kidd, Riverside Cabins, Murfreeboro, Ark.

boro, Ark. CWO Vernon R. Braun, 9004 Rosewood Drive, Sacramento 19, Calif.

to 19, Calif.

Mac & Maggie McShan, 1

Mi. west on Hy. 66, Needles, Calif.

O. A. Reese, 806 E. Boulder St., Colorado Springs, Colo. F. J. Strah, Buena Vista, Colo.

William Guild, Director The Science Center, St. Petersburg, Fla.

P. W. Holstun, 5235 Attleboro Ave., Jacksonville 5, Fla.

Mrs. John C. Lawrence, 2311 Arcadia Dr., Miramar, Hollywood, Fla.

Miss Marion McEntire, 349 N. Elm St., Commerce, Ga. Charles Johnson, 1033 Seminole Trail, Frankfort, Ky.

Albert & Emily Bettey, 139
Hale St., Winchendon,
Mass.

Raymond J. Crisp, 9 Gilletts Lake, Jackson, Mich. Mr. & Mrs. Stanley Oman,

Mr. & Mrs. Stanley Oman, Little Girl's Point on Lake Superior, Saxon, Wisc. (16 miles north of Ironwood, Mich.).

Hjalmer Bergman, Mineral Rock Gardens, Ely, Minn. Gust Korpi, 5th St., Box 132, Soudan, Minn.

Mrs. Lawrence Shepard, Bovey, Minn.

Merryl & Mary McCoy, RR 3, Kahoka, Mo.

Miss Irma Painter, 1315 Burlingate Pl., Burlington, N.C.

Thurston Smith (12 yers.), Hillsboro, N. C. Norman E. Dubie, Jr., 44

Summer St., Lancaster, N. H. Mr. & Mrs. Charles Ashton,

Northwest Main St., East Douglas, Mass. Miss Edna M. McDonald,

626 Kellogg S.E., Grand Rapids 6, Mich. Rev. M. Everett Corbett, Ac-

worth, N.H.

Lewis F. Valachovic, 110 Burton St., Johnstown, N. Y. Edwin K. Kraul, La Cima Mo-

tel, A.P.O. 344, Chihuahua, Chi., Mexico. Egbert McElroy, RFD 1, Box

3, Monroe, N. Y. Thomas W. Carroll (age 16),

101 N. Chestnut St., Mount Olive, N. C. Herby Bolik, 26 Wilson

Herby Bolik, 26 Wilson Drive, Morganton, N. C. Paul H. Hughes, Pixie Motel, Linville, N. C.

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V. Sabin, 723 Steves, San Antonio, Texas.
Dr. & Mrs. H. R. Thomas,

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Larry Volkert, 54 N. Pleasant St., Middlebury, Vt. Nelson R. Longe, 5 Leonard

Ave. Springfield, Vt. (Continued on page 169)

ROCKS AND MINERALS

# Mineral and Fossil Areas In Germany

By DR. WERNER LIEBER

Dante Str. 50, Heidelberg, Germany

In the January-February 1960 (P. 42) issue of this magazine, the editor, Mr. Peter Zodac, published some questions sent in by Mr. Richard C. Carter who wanted information on German localities. Mr. Carter would also like to find out if there are any mineral clubs in Germany. Since this number of R&M was sent to the readers, I received many letters from American collectors and from many other countries, too. They all wanted information on the most different things. Therefore, I believe that this article could be of interest to the readers of R&M because I shall try to answer all these questions and to give an idea of the present situation here in Germany.

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The last question of Mr. Carter is very easy to answer. In Germany exists one dub like the R&M Association. Its name is "Vereinigung der Freunde der Mineralogie und Geologie (VFMG)", what means association of friends of mineralogy and geology. The address of the association is Dante-str. 50, Heidelberg, Germany. The club publishes a monthly magazine for collectors, the name of which is "DER AUFSCHLUSS". The association counts at the present time 1,600 members. About 90% of them live in Germany, the other 10% live in Holland, Austria, Switzerland and many other countries of Europe, but also in North and South America, Australia and Africa. The reader might be astonished about the small number of members. Let us suppose, that in Germany possibly may live another 1,500 collectors who are not members of our club, then we would count only about 3,000 collectors in Germany. Don't forget, however, that Germany is a very small country. On the enclosed map I have marked the borders as they were in 1930. That country had the size of the States; Alabama, New York and Wyoming together. After 1945 the land east of the interrupted line came under Russian and Polish goverment. It has the size of Alabama. The larger part was divided into the present Federal Republic of Germany in the west and the Russian Zone in the east. West Germany has a size of about Wyoming and has about 50 Million people; the size of East Germany is about the same as that of New York State and has about 17 Million people. In these two parts of Germany (the size of Wyoming and New York State) live about 3,000 collectors, 1,500 of them are members of our association.

Germany has many locations, both for minerals and fossils. A geologist said, "Middle-Europe is the pathologic point of the earth crust", because one can find on this little spot of the earth ball nearly all kinds of fossils in the many geological formations. We find paleozoic rocks from Silur to Devon, Carbon and Perm, we can collect in all zones of Trias, Jura, Cretaceous and Tertiary. Many famous mineral locations are spread over Germany, the most important of them I have marked on the enclosed map. All of the locations are near or in the mountains of middle and south Germany, while the flat lands of north Germany have no remarkable mineral locations, except a few salt mines under ground. But the area is sometimes interesting for petrographic interested rock collectors. During the icetimes, wide parts of north Germany were covered with thick glaciers, which transported a great variety of the different rocks from Scandinavia to north Germany.

Many hundred years ago, Germany had many more mines than to-day. Remember, that even the old Romans operated some of the ore deposits. The most important times of ore mining, however, were during the middle ages. In the little country of Germany we counted many hundreds of mines, most of them are abandoned since 100 years, others are still in operation. I can not registrate all of the mines, which are still in operation and where a



Mineral and Fossil Areas of Germany

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fe H sl collector can find still good specimens. But, I shall mention the most important

places for fossils and minerals.

First the fossil locations. Although I m no fossil collector, I believe that the following 4 places are not only known in Germany, but also in other parts of the world. (They are marked A, B, C, D, on

the map).

(A) Bundenbach. This is a little village in the Hunsrück mountains of west Germany, not far from Idar-Oberstein (1). Very near the village of Bundenbach there are many mines which operate for a dark gray under-Devonian schist. The schist is used for roof slates. But, in the schist we can find wonderful fossils, such as sea lilies, sea stars and trilobites in a wide variety.

(B) Erkerode. This is also a little village east of Hannover city. There are some quarries which operate for limestone. This Triassic limestone is called "upper Muschelkalk" and contains many beautiful sea lilies of the type "encrinus

liliiformis".

(C) Holzmaden, a little village not far from Stuttgart city in Württemberg, South Germany, is situated at a Jurassic ridge, which is called "Schwäbischer Ju m". These mountains show all zones of the Jurassic formation. Holzmaden has many little quarries which operate in the zone of Lias. Many fossils have been found, such as sea lilies and ichthyosaurus in complete examples. A museum in "Hauf-Museum" Holzmaden, called shows the most important fossils found at this place. Still to-day one can find many interesting fossils.

(D) Solnhofen. About 50 miles northeast of point (C) is another famous place, where limestone for industrial purposes is yielded. The quarries operate in the upper Jura, called white jura. Beautiful fossils have been found, among them pterosaurus and many kinds of ammonites.

These four fossil locations are by far not the only ones in Germany. Many of them are spread over the whole "Schwäbischer Jura" near point (C) and (D), but also in North Baden near point (6). I have described another interesting location near Darmstadt, the Messel oil schist,

published in R&M November-December,

1957, pages 547.

Now the mineral locations. I shall mention the locations, where one can still find minerals. Besides these, a few well-known mines are marked on the map, because they produced some remarkable species, many of them are in all collections of the world and are still on the market. (Their locations are marked 1 to 31 on the map).

- (1) Idar-Oberstein. German grinding center of the jewelry industry. I described the location in R&M magazine, July-August, 1954, page 383. In and around the town are wide areas of melaphyr and porphyry rocks with agates, amethyst xls, smoky quartz xls, zeolites xls, calcite xls, and prehnite. About 20 miles south-east of Idar-Oberstein is another good place for prehnite and zeolites, not far from Kaiserslautern. The little place is called "Rauschermühle". Still in operation.
- (2) Some villages around Aachen, near the border of Belgium and Holland. The most important places are Altenberg and Stolberg. Lead-zinc mines of metasomatic type. Very good pieces of the so called "Schalenblende", a mixture of crypto-crystalline, banded sphalerite, wurtzite, smithsonite, hemimorphite. Most of the mines are now abandoned, because of the low price of zinc.
- (3) "Siegerland", summary name of an area between Köln and Westerwald mountains. Single locations are the villages of Siegen, Horhausen/Westerwald, Wissen, Herdorf, Betzdorf, Willroth, Müsen, Littfeld and others. Hydrothermal type of siderite xls, chalcopyrite xls, bournonite xls, millerite xls, galena xls. rhodochrosite xls, malachite, native copper, psilomelane, tetrahedrite xls and others. Good crystals are now rare, because they operate now in great depth, where especially massive ore is found. These mines are very old.
- (4) Lahn Dill area of Hessen, 50 miles north of Frankfurt. Many mines which operate for massive hematite, submarine type. Single locations are Dillenburg, Oberscheld, Weilburg, Ehringshausen. Minerals: hematite as kidney ore, calcite xls, quartz xls.

- from the Rhine River, with the abandoned mine "Friedrichssegen", which brought out beautiful specimens of green and brown large pyromorphite xls. Such pieces are still on the market. Not far from this town another mine of the same type, called "Rosenberg" near Braubach, hydrothermal lead-zinc mine. Excellent pieces of brown pyromorphite xls. Still in operation, but crystals are rare.
- (6) Wiesloch/Baden, village a few miles south of Heidelberg. Lead-zinc mine of metasomatic type. Was more than 1,000 years in operation, but, closed 7 years ago, because of decreasing zinc prices. Excellent pieces of "Schalenblende" (explanation see No. 2), baryte xls, calcite xls, hutchinsonite, gratonite, jordanite. Many pieces still on market.
- (7) Middle-Black-Forest/Baden (Schwarzwald). Many old mines, which were intensively operated during the middle ages, but most of them now closed. Single locations are: Wittichen, different abandoned mines of the cobalt-nickel-silverbismuth-uranium-type. Investigations for uranium minerals have been made after war, but the amounts are too small to operate the mines again. Collection pieces of wittichenite, klaprotite, smaltite, erythrite are still found. Wolfach: abandoned galena mine, excellent pieces of dyscrasite have been found. Seldom on market. Fluorite and baryte mine still in operation.
- (8) South-Black-Forest around Freiburg/Baden. Single locations are "Schauinsland" mine, hydrothermal type of galena-zinc minerals, closed since 8 years. Good pieces of galena xls, sphalerite xls, pyromorphite xls, calcits xls still on market. "Finstergrund" and "Teufelsgrund" a few miles south of Freiburg city are fluorite mines which are still in operation. West of Freiburg near the River Rhine an old, inactive vulcano of oligocenic age with interesting rocks and minerals such as dysanalyte, xls, koppite xls, melanite xls, wollastonite, zeolites xls. A few miles south of Freiburg an underground mine operating for rock salt. Its name is Buggingen.

(9) Heringen near Werra River/Hessen. Large salt mines under ground. Among many different kinds of salt minerals occurs also blue rock salt. In operation.

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- (10) Salzgitter. Many mines working for oolitic limonite. No interesting collection pieces, but, many fossils.
- (11) Harz mountains. Famous mining district. Now divided. Mining carried on since early middle ages, but some mines are still in operation. Clausthal-Zellerfeld: hydrothermal lead-zinc deposits with galena xls, sphalerite xls, tetrahedrite xls, bournonite xls, calcite xls, quartz xls the rare selenium minerals clausthalite tiemannite, naumannite, berzelianite. Abandoned, but on the dumps specimens can still be found. St. Andreasberg: hydrothermal lead-zinc deposits with beautiful minerals, which went into all collections. such as calcite xls, pyrargyrite xls, native arsenic, dyscrasite xls, native silver, stephanite xls, harmotome xls, desmine xls. Closed since 1912, but sometimes pieces still on market. Rammelsberg near Goslar: large lead-zinc-copper mine of sedimentary type. The pieces are massive, but show very nice structures when polished. Still in operation.
- (12) Harz mountains on Russian zone territory. Ilfeld: abandoned mine with beautiful manganite xls. Neudorf: abandoned mine of hydrothermal lead-zinc ores with excellent galena xls as cube-octahedrons.
- (13) Stassfurt, oldest salt deposits of Germany. Mostly massive salts such as sylvite, polyhalite, carnallite, boracite, kainite and others. In operation.
- (14) Mansfeld, village at the extreme eastern part of the Harz mountains on Russian zone territory. Different mines which are still in operation for the so called copper-schist, containing native silver, niccolite, maucherite, selenite xls and others. Eisleben: about the same conditions. Beautiful selenite xls pieces are well known.
- (15) Ilmenau in Thuringia. Manganese deposits with nice collection pieces such as pyrolusite, manganite, hausmannite.

(16) Fichtelgebirge, an area with many interesting locations such as Göpfersgrün and Thiersheim, both famous for steatite and pseudomorphs of steatite after quartz xls. Mine "Bayerland" at Waldsassen with the rare mineral falkmannite, Epprechtstein with quarries for granite, which contain geodes with apatite, topaz xls, quartz xls, fluorite xls. Weissenstadt has also different granite quarries with pegmatitic minerals. All locations in operation.

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(17) Oberpfalz. This is an area with different most interesting locations. Nabburg and Wölsendorf: fluorite mines, which produce nice crystal groups. Here occurs a black-blue kind of massive fluorite in course of an influence of radioactive radiation. In the fluorite one finds sometimes interesting secondary uranium minerals such as uranotil, torbernite, autunite. Others minerals are calcite xls, barite xls and quartz xls. Also massive pitchblend is found. A few miles west of point (17) is the town Sulzbach-Rosenberg with large deposits of iron ore (limonite). One of the interesting mineals from there is the weinschenkite. Pleystein: little town with a large rose quartz rock in the middle, containing different phosphate minerals, among them strengite xls. Hagendorf: interesting phosphate-pegmatite with triphylite, zwieselite, wolfeite, hagendorfite, vivianite xls, hureaulite xls, strunzite xls, rockbridgeite, laueite, stewardite xls, heterosite and others. All of the mentioned locations in operation.

(18) Vogtland is an area near the Tschechoslovacian border situated on the Russian zone territory. Different mines, which produce nice specimens with secondary uranium minerals, especially from Bergen.

(19) Famous area with the following locations: Aue/Saxony, Johanngeorgenstadt, Schneeberg, Annaberg, all in Saxony. The mountains which go along the German-Tschechoslovacian border are called Erzgebirge. On the other side, between points (19) and (22) is the location St. Joachimstal. All of the locations belong to the so-called cobalt-nickel-silver-

bismuth-uranium formation. The mines there are in operation since the middle ages, but at the beginning of this century they have been closed. After second world war, the Russians opened the mines again to search for uranium. They have been successful, and since 1946 many new mines have been opened. The uranium minerals are "taboo" of course, but many other interesting and beautiful specimens have been found. However, the collectors over there are not allowed to trade or exchange with collectors outside of the Russian zone of Germany. Minerals: annabergite, erythrite xls, chloanthite xls, silver, proustite xls, pyrargyrite xls, native arsenic, different secondary uranium minerals, different cobalt and nickel ores. Also in the area is an interesting occurrence of blue apatite xls near Ehrenfriedersdorf.

(20) Freiberg/Saxony was a famous mineral location. Only very few specimens can be found at the present time. Specimens are seldom on the market, such as native silver, argentite xls, miargyrite xls, pyrargyrite xls, proustite xls, stephanite xls, arsenopyrite xls, tetrahedrite xls, argyrodite xls, jamesonite and others. Southwest of point (20) near the border is the interesting location of Zinwald, which produced beautiful specimens of cassiterite xls, zinnwaldite xls and wolframite xls. Some are still on the market.

(21) Striegau, a town west of Breslau/Schlesia, can no longer be visited, because it is under Polish government. The place had many granite quarries, which had inclusions of geodes with beautiful orthoclase xls, desmine xls, epidote xls, chabasite xls and quartz xls. Specimens rare on market.

These are the most important places in Germany. Of course, I have mentioned only the most remarkable ones. It seems to be useful to mention some other locations outside of Germany, because the German collectors like to trade also with collectors especially from Austria and Switzerland. First I would like to show to the readers the point (22), which is the world known town Karlsbad in Tsche-

choslovacia, after which the "Karlsbadtwins" of orthoclase are named.

(23) Werfen/Salzburg, in Austria, a famous place for the rare minerals lazulite

xls and wagnerite xls.

(24) Bleiberg near Villach/Carinthia in Austria is a very large metasomatic lead-zinc mine which was even operated by the old Romans and is still operated. Besides galena xls, barite, calcite xls, sphalerite, it produces also small amounts of well crystallized wulfenite xls and the rare mineral ilsemanite.

(25) Hobe Tauern mountains, Austria. A wide area with many famous locations, all of them in high regions. Stubachtal: magnetite xls, apatite xls, adularia xls, rock crystals. Habachtal: epidote xls. Untersulzbachtal: "Knappenwand" world's most famous locality for epidote xls (abandoned!). Obersulzbachtal: epidote xls, adularia xls, rock crystals, sphene xls and others.

(26) Alps of Zillertal. Garnet xls, rock crystals, adularia xls, albite xls and others.

The following two locations are in Switzerland.

(27) Tessin, Pizzo Forno, Campolungo. These locations are famous for staurolite xls, cyanite xls, tourmaline xls, tremolite xls and others.

(28) St. Gotthard mountain and its surrounding with the single locations Maderanertal, Etzlital, Sedrun, Airolo, Furka-Pass, Göschenen, Grimsel, Griesental are famous for rock crystals, adularia xls, sphene xls, apatite xls, hematite (iron rose) xls, rutile xls, smoky quartz xls, anatase xls, brookite xls and others.

Besides these two areas, in the Alps of Switzerland many other places are excellent for good minerals (I mention pink fluorite), but all of them are not easy to collect, because they are often high in

the mountains.

(29) Baveno, a place in north Italy, with granite quarries. sometimes the granite contains geodes with orthoclase xls. The "Baveno-twins" are called after this place.

(30) Dauphiné, a place in the French part of the Alps. Bourg d'Oisans is the

location where the excellent axinite xh

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(31) Chessy near Lyon in France is the location for the excellent cuprite octahedrons and pseudomorphs of malachite after cuprite xls. Abandoned.

I would like to talk a bit on the present situation of the collectors in Germany, because it seems that some problems are very similar to those of the American collectors. Perhaps some of the readers can give informations to me, how the situation is in the States.

As editor of the German collectors magazine I have good contacts to many collectors, and many of them told me that they are no more successful in collecting during the few past years. The increasing number of collectors cannot be the reason for this statement, nor the decreasing locations for good minerals, because 100 years ago we had much more collectors than in the present time. In former times, the pupils learned about mineralogy even in the elementary school, and many more people collected. On the other hand, more new locations have been opened during the past years, especially quarries. And in the present time the physics and chemistry seems to be more important in school than mineralogy.

I believe there are two reasons for the failure of the collectors: Germany is a small country, and in former times, only few people had a car. So they collected only at locations near their home town, but were very active in exchanging minerals with other collectors. At the present time, many collectors have a car, and so visit locations far from their home town. The extreme distance from the northest to the southest points of Germany is only 500 miles air line, so one can visit every place over the week end. When you enter a quarry on Sunday morning, hoping to find good specimens, you feel that, one hour before, perhaps five other collectors "cleaned" the place extremely.

The second reason is that the miners feel, that the pieces picked up by the crazy collectors must be "worth something". They consequently hold back the best specimens and wait for collectors

who pay. Of course, also in former times the collector gave a little gratuity to the miner, perhaps a few coins or a cigar. But to-day, the miner says "For that piece I can get 20 Marks". Many collectors pay the price, although the piece is not worth more than 5 Marks.

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We know of collectors who pay a lump-sum to the miners and load up their car with 50 or 100 pieces of the same type. Of course the best pieces are found by the miners as they are the first ones there when a blast opens a new vein or a cave. And they save the pieces for the best paymaster. The poor collectors cannot be successful.

There are also many so-called "wild dealers". I don't speak of the authorized dealers, we have only a very few in Germany, I am speaking of people, who change their hobby into a business, who load up their cars with specimens and sell the pieces to other collectors for high prices, even if the names of the minerals and the locations on the labels are wrong.

They sell the pieces to beginners who don't have much knowledge about mineralogy. They sell to collectors who have no idea about correct prices.

It is not easy for a collector to get really good specimens, if he does not have some connections with the boss of a quarry or the foreman in a mine. If he wants good specimens for his collection he has to buy them in an authorized mineral shop. But the regular prices for minerals have become very high. They are about three times as high as ten years ago.

This is the present situation in Germany for an advanced collector. The beginners, however, have a wide field of old dumps, abandoned mines and quarries.

I hope that I succeeded in answering the questions of many readers of this magazine and I would be glad if an intensively exchange between American and German collectors, real hobbyists, could take place.

## COLORADO SCHOOL OF MINES FEATURED IN GOVERNMENT MOVIE

GOLDEN, Colo. — The Colorado School of Mines has been selected as one of six leading American colleges and universities to represent this nation's program of higher education in a federal government movie.

Dr. John W. Vanderwilt, Mines president, announced Oct. 31, 1960, that Mines will be featured in the United States Information Agency film "Higher Education in the United States." Dr. Vanderwilt also stated that film production crews from Milner-Fenwick, Inc., Baltimore, Maryland, began shooting the Mines sequence early last November.

The large-budget film is intended to anwer a successful series of movies produced by the University of Moscow, illustrating the educational opportunities available in Russia.

A group of education agencies cooperated in selecting the six schools to represent this nation.

The other five schools are Harvard University, University of Pittsburgh, California Institute of Technology, and Goucher and Wittenberg Colleges. Each was selected as the outstanding school for its particular type of higher education and each school will be featured in a five minute portion of the half-hour film.

The movie is designed for two publics. It will be given wide distribution abroad, in an

attempt to show that American schools possess an academic freedom not available in Russian schools. The film will also be shown in the United States as a capsule portrayal of leading American colleges.

Included in the Mines sequences for the movie are shots of lecture and laboratory classes, the School's mine, sports activities, research and the Mines program of education for students from abroad.

### SMITH'S "HERKIMER DIAMONDS"

Would you please send me any information you may have on the location of Herkimer "diamonds". We hunted with greatest success at Middleville, N. Y., last summer at the old Tabor farm. It just seems there should be other locations than the two adjoining farms.

Mrs. John Silloway 388 Harbor St. Conneaut, Ohio

Smith's "Let's hunt for Herkimer Diamonds" tells all about the "Diamond" region and is full of tips on finding "diamonds". It costs only \$1 and is for sale by the author, Claude A. Smith, Box 291, Geneva, N. Y. This booklet is advertised in this issue of R&M.

#### MICRO-MOUNT BOXES WANTED.

R&M has received numerous requests for manufacturers of micro-mount boxes. Dealers carrying M-M boxes are urged to feature them in their ads.

# CONNECTICUT ROCKS AT LUTZ

By MRS. FRED SWEET

42 N. School St., Manchester, Conn.

When the Lutz Junion Museum, of Manchester, Conn., needed a new exhibit of rocks and minerals recently, Frederick Sweet, of Manchester, designed and produced a novel one that both children and adults find entertaining and educational. The exhibit has electrical wiring, which by means of push buttons, enables a visitor to find the geographical location of minerals common to Connecticut.

Mr. Sweet used a display case donated by a leading manufacturer, as a background for the exhibit. He obtained a County map of Connecticut which he glued to a sheet of 1/4" plywood, then sawed out the coastline. Next he spotted various quarries throughout the State and arranged a system of lights and push buttons to show where the various samples on the attached display board, were found. Although these specimens are found in a good many quarries in the State, particular ones were selected to provide state wide coverage.

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A 6 volt transformer was used to cut the current from 110 to 6 volts as a safety factor, and also to cut down the heaviness of the wiring in back of the panel. Doorbell wire connected the push buttons to the lights. The entire exhibit is illuminated by means of a fluorescent fixture in the canopy overhead, and is controlled by a master switch.



Joel Sweet presses a button to see where mineral is found in Connecticut

The samples are of generous size and were chosen with a view toward outstanding characteristics and eye appeal. They are glued to a slanted bench with "Pliobond". Under each specimen is its name and a push button. Sometimes two minerals will light up the same light; for example, the push button over the limonite sample will cause the light located at Ore Hill, Salisbury, Conn., to shine. The push button over the hematite specimen will indicate the same location. Also appearing on the board is a plastic covered information sheet which gives a few salient facts about each rock or mineral. Obtaining the rock specimens was the easiest part of making the display. Did you ever try to get 25 identical doorbell push buttons, or Christmas tree light sockets out of season? (New lights were needed for the Sweet's tree anyhow!) The exhibit is a great favorite with visitors. It attracts almost as many viewers as the salt water tanks (holding starfish, scallops, crabs, whelks, mummichaugs, etc.,) and the dolls, or the Indian relics, or Chinese Art.

A list of the specimens and their corresponding quarries and locations (all in Connecticut) shown on this exhibit follow:

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Galena in Ore Hill Siderite Roxbury

Garnets Garnet Mine Roxbury

Globular Branchville

Mica

Hematite Ore Hill Salisbury Limonite Ore Hill Salisbury

Kyanite Thomaston Flood Control

Dam

Lepidolite Strickland Quarry

Portland

Limestone New England Lime Quarry

Malachite West Hartford Trap Rock

Quarry

Mica Isinglass Hill Quarry

Portland

Sandstone **Buckland Quarry** 

Manchester

White Rock Quarry Tourmaline

Middletown

Tremolite New England Lime Quarry

Canaan

The Lutz Junion Museum, 128 Cedar St., Manchester, Conn., is open daily except Monday, 2:00 to 5:00 p.m., admission free, Mrs. Madeline McAwley, Director.

#### CAPPOTTO MINERAL MUSEUM

Frank Cappotto, Rock Creek, Ohio, one of R&M good subscribers covering many years, has opened up a rock shop and release museum in a building on E. Water Street, one block from Route 45 intersection, in Rock Creek, Ohio. Operated free of admission by Mr. Cappotto, the museum contains thousands of precisers collecting 20 years and 300,000. specimens culminating 20 years and 300,000 miles of collecting through the U.S., Canada and Mexico.

In conjunction with the museum, Mr. Cappotto's daughter, Mrs. Irene Shore, offers all types of hand-made jewelry for sale.

#### LOVELADY'S REFERENCE CHART OF NATURAL GEMSTONES

Every now and then someone comes up with an idea or suggestion to make the study of rocks, minerals, gems etc. more interesting and easier to comprehend. Now we have another big help, Lovelady's Reference Chart of Natural Gemstones. This is a large chart for your wall-an instant source of data on the physical and optical properties of 102 gemstones (from agate to zoisite). It is a handsome chart, 23 x 38 inches, bond paper, printed in 2 colors and sells for only \$1.25. Compiled and published by Lee R. Lovelady,

Box 870, Douglas, Ariz. Order your chart

# A TRIP TO NOVA SCOTIA — JUNE 1959

By MARGARET AND DANA ROGERS

820-101/2 St., S.W., Rochester, Minn.

We had wanted to take a trip to Nova Scotia, Canada, ever since reading an article in the National Geographic Magazine, August 1957, by Paul A. Zahl on The Giant Tides of Fundy. In writing the article the author became so interested in the rocks and rockhounds of Nova Scotia that he included information about them with pictures of himself and his family looking for amethyst between tides and also pictures of some of the prominent people interested in rocks in Nova Scotia. After that we found articles about rockhunting in Nova Scotia by John Mihelcic, Rocks and Minerals, Nov-Dec 1955; by Joe Rothstein, Rocks and Minerals Nov-Dec 1958; and Ruth A. Kirkby, Gems and Minerals, Nov. 1958. We enjoved the area very much. It is beautiful country with ever present ocean scenery and green mountains coming right down to the sea. It was a 6000 mile trip which was almost too far for the three weeks we were gone but we hope we can go again.

Before we left home we wrote to Mrs. Isabel MacAulay, Vice President of the Halifax Rock Club. She was most cordial. One evening she got a group of the club members together and Dana showed some of the slides he had taken of rockhunting in Minnesota, Montana, and other western locations. We have found people who like rocks, interesting and friendly, from coast to coast. Mrs. MacAulay's interest in rocks is local agate and amethyst and other minerals set in hand-wrought silver

jewelry.

Much is done with native handicrafts in Nova Scotia. As we entered the Province a book on Handicrafts was given to us at the Information Bureau and the lapidary people Mr. Zahl wrote about in the National Geographic article were listed so we felt free in looking them up. The Province trains people in the crafts and teaches them to use native materials. Mrs. MacAulay has an attractive gift shop, The Tartan Shop, at 389 Barrington

St., Halifax. She had pottery for sale using Nova Scotia minerals in interesting ways; weaving, carving, as well as handwrought silver jewelry set with agate and amethyst. She and her partner have designed attractive blue and yellow plaid that has been officially registered as the Nova Scotia tartan.

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Our first stop in Nova Scotia was at Eldon George's Shop at Parrsboro, He and his mother have a well-known shop in their home and Mr. Zahl, in the National Geographic article, has several pictures of him. Mr. George directed us to Wasson's Bluff where, we had read in Dana's Text Book of Mineralogy, we could find chabazite crystals. He told us that Mr. Wasson, for whom the bluff was named, still lives in a small house at the top of the bluff so we looked him up, He has had a stroke so cannot look for crystals any more but likes to talk about them. He collected them for years for some commercial project. They are found in vugs in the steep cliff that overhangs the north shore of the Bay of Fundy. Mr. Wasson used to let himself down over the cliff on a rope to get them. He directed us to the beach where we got some fairly good specimens, but the tide was coming in and we could not look very long. Mr. Wasson's son lives on a farm nearby and we bought some good specimens from him. This was at Two Islands, Nova Scotia.

We spent the night at Five Islands at Island View Court owned by Mr. and Mrs. Bruce Patterson because John Mihelcic wrote that they collected minerals. We talked about rocks and looked at their collection. We had planned to go out to an island agate hunting with them between tides the next morning. To get to the island in time we had to leave at 7 A.M., but at 6 it was so foggy that Mr. Patterson said it would be impossible to go. The agates in Nova Scotia are mostly seam agates. The cabochons we saw cut from them resembled agates found

in California and Mexico.

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We went on to Hall's Harbour where we had our best opportunity to view the tide. It is a quaint little harbour in a fishing and resort village. We were there at low tide when there was just a trickle of water down the center of the harbour. When we left about three hours later the boats were all floated and the water had almost come to the top of the steps that had led down into the harbour. We got some good pictures there.

While we were in Hall's Harbour we called on Mrs. Paul Mosher. She had some nice agate cabochons in handwrought silver jewelry. She, also, has some beautiful specimens found in the Bay of Fundy area. Writers generally speak of the pale color of Nova Scotia amethyst, but Mrs. Mosher had amethyst of a lovely deep color as well as the lighter shades usually seen.

We stopped in the evening at the 'Ruf and Ready Agate Gift Shop of Mrs. Juanita Cochrane in Windsor. She and her husband had just returned from an all day agate hunting trip in the Digby area. She sells rough and tumbled agates and cabachons set in jewelry.

It was foggy all the time we were in Halifax, but we had a good time just the same. As we drove towards Cape Breton Island the fog lifted and we saw a beautiful sunset at Port Hood where we spent the night. We had good accommodations while we were in Nova Scotia and the lobster and fresh salmon were out of this world! There are not too many places to stay on Cape Breton, however, and it is a good idea not to travel too late at night. The wind blew hard during the night and when we awoke the fog was gone. The day around Cape Breton will never be forgotten. I have never seen the sky and the ocean so blue nor the surf and the clouds so white. The road follows the shore closely and the villages are clusters of gray weathered houses and usually a steepled church. The fishermen are busy with their nets and lobster traps on the docks and the farms come right down to the shore. In fact the men are both farmers and fishermen. The scenery becomes more and more mountainous as the road goes north. They do not have the altitude of western mountains and are covered with green deciduous trees, but as they start at sea level they are real mountains just the same. We stopped at a few beaches to watch the surf and explore among the rocks. At one place we found rocks covered with water-worn amethyst and we thought that if we had more time to look farther we might have found some vugs with good crystals in them.

When we got to New Glasgow the next noon the fog had returned and we decided to head for home 2000 miles away. We stopped at Moncton, New Brunswick for the night and were there at a good time to see "the bore" when just at the turn of the tide it comes in with one big wave. The sea life comes along with it and the gulls fly along the crest of the wave. It is an interesting sight.

We drove to Fredericton, the capital of New Brunswick, and took a trip up the valley of the Nashwauk River about which we had read an article in the January-February 1958 Rocks and Minerals called Collecting in New Brunswick by Lawrence and Harrietta Schoppee. The trip was to The Burnt Hill Tungsten Mine. Their directions for getting to the mine were excellent, but where the road became the property of the Miramiche Lumber Co., the gateman would not let us go farther even for a fee, as the mine had been closed and he would not allow any one into the woods without a guide and there was no guide available. We drove back to Fredericton disappointed but still have kodachromes of the lovely valley with its covered bridges to remind us of a pleasant day.

We crossed Maine on a road about 75 miles inland from the shore. It was the Fourth of July but there was hardly anyone about. We decided they must have all gone to the beaches to celebrate. Many westerners have said to us they did not want to go East because of the traffic and crowds of people. We were not bothered by crowds on any part of our

trip. We went East on the Thruways from Beloit, Wisconsin to Augusta, Maine and came home via Ottawa and Sault Ste. Marie. The only big city we went through was Montreal and we had no difficulty there.

We spent two days around Paris and Rumford, Maine. We have been there twice before and have always had a good time there. Stanley Perham has a rock shop at Trap Corners, West Paris, Maine, which is a good place to start looking for rocks in the area. In fact it was on a rainy morning in 1947 that we listened to Mr. Perham talk about rocks that gave us our start on collecting rocks and minerals as a hobby. That part of Maine is a pegmatite area with beryl, tourmaline, mica and other minerals found in this type of formation.

At Mr. Perham's shop we bought a booklet put out by the Oxford Co. (Maine) Mineral Society which included articles by the members and their names. We were fortunate enough to meet the president and his wife, Mr. and Mrs. Marion Holman, at Mr. Perham's shop and later looked up other Oxford Co. members.

We went on a field trip with a group led by Mr. Perham to a graphic granite quarry. It was a lovely sunny day and sparkled with mica everywhere. We had fun digging for rose quartz and the specimens are still on our porch window sill.

As we crossed Canada we stopped in Ottawa at the Valley Gem Shop and we took some fine kodachrome slides of the changing of the guard at the Parliament Buildings. This takes place at 10:30 every morning. At North Bay we looked up some interesting rock enthusiasts that we learned about through the Chamber of Commerce. Sudbury is the center of the mining area of the International Nickel Co. We enjoyed watching the dumping of the red hot slag in the evening at nearby Copper Cliff. Shopping is good at Sudbury.

We crossed into the United States at Sault Ste. Marie and stopped to look for banded Lake Superior agates in a couple of gravel pits as we crossed Wisconsin. Minnesota looked good to us and we agreed that to us there is no more beautiful area in the country than the Upper Mississippi River Valley.

## AND THE MAIL KEEPS COMING!

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Dear Editor!

I hate you!!!!!

You didn't even hint that printing my letter (July-August, 1960, p. 340) would launch me on a career of writing, filing, bookkeeping and cataloging!

To date have received 133 letters, written 98, mailed umpteen packages, received umpteen, umpteen specimens, (all very nice incidently).

Now I know how an editor spends at least part of his time but tell me this, When does it taper off? Letters are still trickling in!

I thought I'd swap off my surplus and have more room, instead there are rocks everywhere you look! The word "Colorado" must still have the magic appeal of the gold rush days. I hate to disappoint any of the collectors writing to me but I'm about out of everything I could lay my hands on by making frantic dashes up into the hills week ends. Snow has turned us back the last two trips so I don't see much more collecting in the high country this year.

It came as a shock to many of the people writing in, that the type of Colorado specimens seen in museums could not still be had on a Sunday afternoon. The combination of jeep and bulldozer has stripped many a legendary location clean as a hound's tooth. To get results now in most places you have to dig holes and more holes!

I'm tickled with the whole project tho' even if it may take 'till next spring to complete.

Please renew my subscription to ROCKS AND MINERALS.

Doug Graham 4660 Bryant St. Denver 21, Colo.

P.S.—I should have something to say too, as I have typed letters until nearly blue in the face. Our whole summer has revolved around getting what was necessary to fill the many requests and there have been times when I was sorry there was a Rocks and Minerals magazine. However, we have met very interesting and lovely people, received many very nice specimens, and on the whole found the whole project most interesting.

-Mrs. Doug Graham

# DES MOINES

'62

# FIFTY YEARS OF MINERAL COLLECTING

By GUNNAR BJAREBY

147 Worthington St., Boston 15, Mass.

(Part Three)

The depression of the early thirties did much to curtail any serious mineral collecting. It was during this period, in the summer of 1932, that I took a year off from those unkind conditions and went to study art in Europe. Mineral collecting was of secondary importance and had to fit into the general composition wherever possible.

Those of us who have a more than a mere passing fancy for any country can learn a tremendous deal by visiting the various museums. Thus I had my first encounter with minerals, during this trip, in a museum in Bergen, Norway. The extensive collection there includes extraordinary specimens of the many rarearths minerals of Southern Norway, which kept me busy an entire day trying to cram a thousand mental images behind my eyes and taking notes of the characteristics, associations and localities of a number of Norwegian species.

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Bergen is one of the most beautifully located cities in the world; partly built along the fjord but also climbing high up on the sides of three nearby mountains. There are so many highly interesting things to see and sketch from the bare skerries in the fjord and up to the bald tops of the mountains. A remarkable 900 year old church is located a few miles from the city at Fantoft. It is built of wood and covered with one inch thick shingles or staves which are carved along the edges. Churches of this type still in existence in Norway are called 'Stavkirker'.

This trip was made without any schedule whatsoever so instead of passing thru Bergen I stayed there a whole week. At this time of the year, midsummer, the days up there are almost continuous and with all that daylight and so many things of interest who cares for sleep! To illustrate, I might mention that a few days later I came to Myrdal late one eve-

ning. It was 10 o'clock p.m. before I could get busy with an oil-sketch of a nearby glacier-carved valley. It was cloudy and a bit drizzly but there was plenty of daylight to finish the scene.

After that I stayed two days in Finse. The mountain lake at the station is about 6000 feet above sea level. It was the last week of June but there were ice floes in the water. From Finse Hotel it takes two hours of hiking to reach a section of the Hardanger Vidda Glacier where the ice has crevices showing those bright blues and blue-greens characteristic of glaciers. There ought to have been some specimen material among the fresh and unoxidized boulders and gravel but, altho I looked at many likely places, I found little of interest. On the contrary the rich and fascinating alpine flora with its many species blossomed at the very edge of the receding snow-patches, some flowers seemed to have elbowed themselves right thru thin snow.

Six years later Mrs. Bjareby and I were hiking over the same landscape. At that time I had my sketchbox along and made a hurried oil-sketch of blue crevasses in the glacier. In the vicinity of a glacier on a summer day one should expect anything from bright sunshine to a snowstorm. The ground is water-logged and it does not take many minutes before the shoes become a part of the landscape.

The first mineral collecting stop of this trip was at the famous mineral locality at Langban in Sweden. Since this is one of the three most outstanding localities in the world of today you should know how to pronounce it correctly, so say long-bawn, two long syllables. The old name used to be Langbanshyttan; some old specimens have this antique label.

After the usual formalities at the office I was told to ask for Mr. Finneman who was one of the foremen. He proved to

be well versed with the local minerals and had discovered no less than three new species for which he had been honored by the mineralogists of the Riksmuseum outside Stockholm by naming one Finnemanite. Another one was named Sahlinite; I have forgotten the name of the third. He was delighted to hear that I knew Professor Palache of Harvard and talked about the time when they had collected minerals together at Langban many years ago. Finneman had then many fine specimens which he sold to visiting mineralogists from all over the world. I bought many of the best available—it was the sort of opportunity that does not knock, it merely pats one as lightly as a snow flake. I worked the dumps for two hours and since there were few who did any serious digging or collecting, specimen material was plentiful. I was not familiar with the local minerals but Finneman had no trouble in identifying what I had found. It chagrins me that I was not then interested in micro minerals and neglected to pick up the small stuff. How differently it would have been done now! I would have stayed there a week collecting all the days and 'microscoped' after dark.

Six years later on our way to Finland we visited Langban again. Finneman was there but very few minerals were available because a Geologists Congress had been held at the mine a few weeks earlier. The dumps were covered with much dolomite. However, we worked on the dumps and found several interesting minerals. The following is a combined list of the various species collected either the easy or the hard way during my two visits to the locality:

Native lead, native copper in lead, hematite, braunite, pyrochroite, pyroaurite, magnetite, hausmannite, magnetoplumbite, aragonite, dolomite, hydrocerussite on lead, pinakiolite, anhydrite, berzeliite, manganberzeliite, caryinite, sahlinite, allactite, tilasite, sarkinite, hedyphane, finnemanite, nadorite, ferruginous quartz (red), inesite, kentrolite, molybdophyllite, manganophyllite, rhodonite, richterite, roeblingite, tephroite, trimerite.

I had an uncle whom I had not seen since 1912 when he visited us. He was manager for a huge lumber factory in Bastutrask in Vesterbotten. This town is located somewhat south of the Arctic Circle and not far from the gold mine in Boliden, Sweden. I persuaded him to take a day off and come along to the mine. When we think of a mining town we visualize the usual grimy and dismal groups of shanties. Not so here, the houses are modern and suburban-like in a pine forest.

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We obtained permission to go everywhere except underground. I made a bee line to the sorting tables, actually several moving belts at which many men were picking off the skarn while the ore went down into a chute at the end of each belt. The foreman picked out many good specimens for me mainly of arsenopyrite which is the principal sulfide in which gold, silver and several other metals are finely disseminated. The strong odor of sulfur and the garlic-like fumes of arsenic were too much for my uncle and even if I were a little over enthusiastic I soon joined him outside for a look at the dump material. There was snow on most of it but where the fresh stuff was being dumped I found a few things of interest like mariposite and falkmanite, a variety of boulangerite.

The following morning at 5:22 my train left Bastutrask and at 11:50 it crossed the Arctic Circle. I have regretted it many times that I did not take a side trip to the famous pegmatite quarry in Varutrask, Sweden, with its many lithia minerals like petalite, pollusite, lepidolite and watermelon tourmalines, besides several rare phosphates. If it had been now I would have stayed until I had a reasonably complete suite of the known minerals, however, since then I have obtained some of them from European collectors.

That afternoon I took a short trip up to the Gallivaara Iron Mine, pron: Yellee vawra. There was an interesting collection of local minerals in the office, but none were for sale because a group of German mineralogists had been there a

few weeks earlier. The dumps were covered by enough snow to discourage any prospecting for specimens. Instead I went into an ore sorting building where one of the workers took me around and explained the operation. It was very fascinating to see the electromagnetic revolving drums sort the ore into three grades. The magnets inside are stationary and cover half of the horizontal cylinder from top to bottom. When a lean piece of ore with some matrix or rock strikes the downward moving iron cylinder it simply bounces off into the first chute, whereas a better grade piece is attracted by the magnets and adheres to the drum until it has revolved 90 degrees then, as the drum turns under, the weight of the orepiece pulls it off and it falls into chute No. 2. When a high grade piece strikes the drum it stays on until the drum goes beyond the magnets and then it drops into a third cute. Some of the magnetite dust forms temporary stalactites on the drum and high grade pieces. The fellow handed me a monkey-wrench and told me to test the power of the magnets and not to let go lest the tool would drop into the high grade ore car below. I hung on and the wrench was dragging along the drum until I turned the wrench edgewise, only then the magnets let go of it.

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There is not much daylight in the Arctics in October and it had been dark for hours when I came to Kiruna, pron: Kee runa, the Swedish and Norwegian u is pronounced exactly like the French u. It is another modern city that was started about 50-60 years ago in the bleak wilderness. The only trees that try to grow there are birch and mountain-ash. The latter are planted whereas the struggling Betulae are on their own.

Most of those scraggy birches are less than five inches in diameter and fifteen feet in height—one is reminded of the bushes and trees fighting for existence a few feet above highwater line along the oceans.

In Lappland a great many of the local names are of Lappish and Finnish origin, much like the retention of Indian place names in this country. Thus the lake, bordered in part by the two big iron mines Kirunavaara and Luossavaara, both in Sweden, is named Luossajärvi which is Finnish. The next morning I made a shortcut over the frozen lake to one of the mines and climbed the mountain, on the top and inside of which the mine is located. The ore is mainly magnetite, but there are enormous dumps of the skarn. Unfortunately this was in October and snow covers almost everything except the latest loads dumped. The dumps were on the further side of the huge excavation. Drifting, stinging snow and icy wind made me pass up a possible find. Down in the open cut mining went on as usual with blasts and loading of ore which was hauled to the center of the flat floor where it went down into a chute leading to a horizontal tunnel where the ore is loaded in special ore cars which, after being shunted to the Kiruna yards, are sent up over the divide and downhill to the harbor of Narvik in Norway. There was a small collection of local minerals in the office. One of the most interesting of those skarn minerals was the fairly rare cacoxenite, an exquisite radiating iron phosphate more gold-like than any other mineral.

After having warmed up somewhat in the power station I again crossed the lake towards Luossavaara. My direction crossed that of a few Lapps with a large herd of reindeer. The hoofs make a peculiar clicking noise and the caravan moved quite fast so the short-legged people had to put in a few half running steps now and then to keep up with the heavily loaded animals.

One of the dumps at Luossavaara was the first I came to but it was about as dangerous as a battlefield because skarn was being dumped two hundred feet above and it rolled and bounced all the way down where it scattered over a wide area. There was a fairly quiet section where I picked up a few iron silicates and withdrew in good order without having suffered any casualty. I was saddened by the sight of the many broken and dead and doomed birches which had

withstood so many wintry ordeals to be killed by flying rocks.

I had about 35 pounds of specimens to pack and send to Mother's place in southern Sweden; I wonder what she thought when she received the heavy packages.

The mountainous landscape is wonderfully wild and I had had a whole day of it, I simply had to do some sketching. Most of the forenoon was nice and sunny but for a scattering of some flimsy sirrus clouds. When the ore-train arrived at Abisko I stepped off. The scenery all around is magnificent. There was not much snow and it was easy to follow the paths the reindeer make. My second sketch was almost finished when it started to snow; no time was lost in getting back to the station especially since I remembered that this was wolf country. I followed a wildly cascading brook where there was much reddish feldspar but huge botryoids of ice made it impossible to get near the stuff.

Abisko has a first rate hotel but I continued with the next ore-train. It is impossible to describe the grandeur of the wilderness but I like to say that it was one of my most exciting days. From Riksgränsen, the station at the border to Norway, there is a short downhill run to Narvik. The railroad descends along the south side of the fjord in a rather steep gradient and the red hot brake-shoes spewed sparks all along until the train stopped at the wharf where the ore is crushed and graded before it goes into the holds of steamers. Narvik is another one of those Norwegian cities with fjords and ice-topped mountains almost all around. It is as far north as the northern coast of Alaska and during the winter months the sun plays hide and seek with the mountains on the horizon all day

From my windows in Hotel Royal there was a superb view of the jagged mountains on the northern side of Valnesfjord. By 8 o'clock in the morning I had made a panoramic sketch in three sections of the sunrise effects on those wild peaks. Later in the day I made a

sketch of the fjord and some of the mountains. It was not far from zero temperature and in order to keep the water from freezing I had the bottle inside my sweater but in a minute or so ice xls started to grow inside the watercolor box. The sky on the paper turned into a network of blues and greens and the lower part of the paper covered by the grey blues and blue greens of the water of the fjord had beautiful icides all over. I was amazed at the effect but when I took it into the room those intricate reticulations vanished almost competely. The next morning I went for a two hour hike along the Beis Fjord. This fjord runs from south to north whereas most of fjords on the west coast of Norway run from east to west. There was enough bottom land on the east side of the ord for a few small farms. Closer to the mountain, south of Narvik, were huge boulders everywhere which had fallen off and rolled all the way to the water and the narrow road detoured many of them, I looked over many boulders and saw evidence of sulfides in several.

(To be continued)

## BERKS MINERALOGICAL SOCIETY

The Berks Mineralogical Society plans to sponor a mineral exhibit at the Reading Public Museum and Art Gallery, 500 Museum Road, Reading, Penna. from April 30th to May 28th, 1961. Admirsion free. Museum open daily from 9:00 A.M. to 5:00 P.M. Sundays from 2:00 to 5:00 P.M.

Possibly R&M subscribers who are not members of any organized mineral clubs might

be interested in the exhibit.

George A. Petro, President Berks Mineralogical Society 905 Meade St. Reading, Pa.

#### UNDERWATER SPECIALISTS!

Editor R&M:

It has come to our attention that you might have call for a diver on occasions. We are fully equipped with a mobile trailer and built in darkroom. Can develop stills and print on the spot (both underwater and above) as we have a portable gas driven generator we carry for trailer and underwater lights. If anyone has need for us, please contact us.

Calvin DeViney Calray Underwater Specialists 1125 E. Grand Blvd. Flint, Mich.



Abbreviations: x!—crystal fl—fluoresces

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xled—crystallized

xline—crystalline

ph—phosphorescence

ALABAMA — Small lustrous brassyyellow xls of pyrite on snow-white marble have been found in the marble quarries at Sylacauga, Talladega Co., Ala. A very beautiful specimen 6 x 8 inches in size is on display in the offices of James Miller Davis (architect), 211-212 Guaranty Savings Bldg., Montgomery, Ala.

ALASKA — "A discovery of free gold ore was made in interior Alaska during the summer of 1960. Exploration during the 1960 season produced 62 lbs. of high grade specimen material and a small tonnage of rich milling ore. It is reported that wall rock impregnated with gold to the extent of assuring considerable mill feed of over \$100 per ton recovery of free gold.

"Geological information has not yet been made public on this deposit. As described to me, the main features, geologically, are: an intrusive of some extent identified as diorite; contact area along the diorite of crushed material and breccia paralleled by a barren white quartz vein 6 feet wide. In the contact zone some 16 minerals are indicated, the only one in commercial quantity so far indicated being free gold.

"Features of this free gold occurrence considered rare are:

1st-Gold deposited in calcite.

2nd—The calcite is brecciated and of three colors, blackish, brownish, and large crystalled pure white, the white calcite being the bonding agent of the breccia which consists of the other calcites. 3rd—Such quartz as has been observed in the immediate area is, variety chalcedony (bluish agate) in 1/4" vein (not gold bearing).

4th—The high grade free gold occurs in thin seams \( \frac{1}{8}'' \) to \( \frac{1}{4}'' \) inches thick in the darkish calcite, adjacent to or paralleling seams of white calcite generally, occasionally both may

be rich in gold.

5th—The free gold occurs almost exclusively in paper thin sheets of varying extent. Frequently sheets parallel each other at 1/8" or closer intervals repeatedly through inches of area. Infrequent branches suggest a preferred angle of junction with the main sheet. These sheets frequently bridge fractures in the specimen, acting as hinges. The longer sheets observed (up to 3 inches) are remarkably straight throughout their length, as are observed branches and detached inclusions.

6th—The placement of gold seems to have been entirely unaffected by environmental conditions or influences as to configuration or form attained. It lies in brecciated material but indicates a wholly independent struc-

ture form.

7th—The consistent continuity of sheets without apparent variation in thickness through 3 or more inches of extent suggests controlled thickness by some influence, directional cohesion or affinity. Probably a type of crystallization on a microscopic scale.

"It is anticipated that the 1961 season's explorations will bring out other mineral and geological features, also unweathered material of enhanced specimen and gem cutting quality."—letter dated Jan. 12, 1961, from P. J. McDonald, 1104 2nd Ave., Apt. 2, Fairbanks, Alaska.

A small but beautiful and extremely rich specimen of the yellow gold in white calcite was sent in by Mr. McDonald.

ARIZONA—"The Bagdad Mine, Yavapai Co., Arizona, has lately produced some unusual material, in the copper family: buckshot size to pea size spheres of gem grade malachite (copper carbonate) with coatings of brochantite (copper sulphate), gem grade chrysocolla (hydrous copper sulphate), and black copper oxide, tenorite, some have little dioptase (copper silicate) all combined to make very unusual, and beautiful cabinet specimens. Only a small amount was uncovered, all of which is now in the hands of various collectors. Bagdad Mine has produced, from time to time, many unusual copper specimens. Some three years ago, a gem grade chrysocolla with inclusion of dendritic copper, was uncovered in small amount .... also cutting grades of azurite in malachite and chrysocolla."-item dated Nov. 30, 1960, from R. A. Richards, Box 44, Morristown, Ariz.

ARKANSAS—"Addition to the minerals found at the Arch St. Pike Quarry, Fourche Mountain, Little Rock (Pulaski Co.), Arkansas.

"In material which I collected July 3, 1960, the following minerals were found which are new to this locality: parisite; well formed cubo-octahedron pyrite; zircon in clear to yellow bi-pyramids; brookite in lustrous black xls, some showing brilliant iridescent coatings; calcite xls. The brookite and calcite are seemingly formed from the alteration of sphene. Sphene xls were found that show successive alteration to calcite and brookite. The brookite was identified by x-ray at the U. S. National Museum (Washington, D. C.), by Mr. Paul Desautels.

"Also found were an as yet unidenti-

fied gray chloritic mineral and some xls that may be bastnaesite.

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"All the above minerals are in microscopic xls."—item dated Jan. 14, 1961, from Philip R. Cosminsky, 303 N. Virginia Ave., Falls Church, Va.

CALIFORNIA—"Here I am again. This time I send you gold. Thought perhaps you would like a polished slab of gold ore from California. No doubt you have gold nuggets but I don't know about polished gold ore cause very few people polish ore. The polish brings out the gold.

"This polished gold ore comes from Burton's Tropico Gold Mine in Rosamond (Kern Co.), Calif., where the largest Southern California gold mill is located. The mine is no longer in operation but it is open to the public for underground guided tours.

"Hope you like the specimen."—recent item from Jean Sigler (Jean's Minerals) 23201 Grandview, Chatsworth, Calif.

A 2x2½ inch polished, thin slab consisting of thick masses of green actinolite with tiny grains of yellow gold and pale brassy-yellow pyrite in smoky quartz. Due to the large amount of chlorite the slab is green to dark green in color. It is a very nice specimen.

COLORADO—"At a prospect in Maggie Gulch near Silverton, San Juan Co., Colo., I found huebnerite xls. They were on the dump and severely damaged but the xls of this mineral are so rare that they still are very good specimens. Some undamaged xls 1/4" long. Most xls are thinly coated with quartz. Associated with barite, fluorite, and quartz. The tunnel was filled with ice in July, and on my next visit I encountered a Grizzly bear in the narrow trail. I was armed only with a mineral pick and decided discretion is the better part of valor. Tunnel unexplored."-item sent in by Pat Fancher, Box 63, Ouray, Colo.

CONNECTICUT—A very interesting specimen consisting of green beryl xl (partly gemmy) in a grayish pegmatite was sent in by Bob Gallant (Gallant Minerals), Box 32, Moodus, Conn.

The locality for the specimen is Turkey Mountain, Haddam (Middlesex Co.), Conn.

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DELAWARE—Lewes Beach, on Delaware Bay, is in the N/E part of Sussex County, Del. We had an opportunity to examine some pebbles (one was a brown chelcedony) that had been collected on the beach by Bob and Hazel Reynolds, 117 Stocksdale Rd., Kingsville, Md.

FLORIDA—From the western part of Pascoe County, Florida, we have 3 grayish calcite concretions that had been collected by W. R. Olsen, Rt. 1, Box 3997, New Port Richey, Fla.

GEORGIA—Opalescent smoky blue and milky quartz of faceting quality occur near Hillsboro (Jasper Co.), Ga.

IDAHO — "The old Tungsten Hill Mine (Sec. 13, T. 64 N. R. Le) is situated about 18 miles north of Bonners Ferry (Boundary Co.), Idaho. It is about 2 miles east of the Camp Nine forest service road and access to the mine is over a jeep road.

"Ore materials examined on the dumps revealed the following minerals: *Scheelite* in minor trace amounts fluoresce bluishwhite to dull golden yellow under s.w. light. Associated with the scheelite is massive garnet and hornblende.

Tremolite—occurs in fibrous white masses with quartz and xline calcite.

Calcite—is mostly massive with some specimes being xline. Some of the calcite exhibits a pale pink fl. under s.w.

Andradite—occurs both in massive and crystal form. Brown to reddish single xls ½ inch in diameter occur associated with massive quartz, fibrous tremolite and hornblende. One small specimen collected shows andradite xls in a group associated with xline calcite and massive gamet."—item from Gerald J. Navratil, Box 408, Middleburg, N. Y.

ILLINOIS—"Limestone is quarried extensively in this area and used mostly on soils and as driveway 'white rock'. We find quite a lot of brown material here which could be chert or jasper as it is not soft enough for limonite. Also geodes with crystal centers, something new for us.

"We find some nice pink and white granite with mica crystals which make nice specimens."—item sent in by Mrs. Bonnie C. White, Rt. 3, Marshall (Clark Co.), Ill.

INDIANA—From an area near Bean Blossom, Brown Co., Ind., we have a beautiful crystal cluster (from a quartz geode) that was sent in by Harry Sering, 350 So. Fenton, Indianapolis, Ind. The cluster consists of lustrous rock xls on which are implanted brilliant black geothite xls.

IOWA—"The other day I was in Des Moines (Polk Co.), Iowa and as we drove out to the Parkway Shopping Center and going along 2nd Avenue I noticed an excavation back into the side of a hill exposing an outcrop of shale and limestone and a vein of coal or black shale. Since such outcrops always interest me, and thinking possibly the shale might yield some fossils, we stopped on the way back for a look-see. No fossil were seen but there were a number of small selenite xls in clusters and singles, etc. None of them very large or outstanding but I thought it might be of interest to W.N.O.M.O. readers since the occurrence was practically in the heart of a great city, on 2nd Avenue - 1710, a drivein with outcrops in back."-item dated July 7, 1960, from Amel Priest, Peru, Iowa.

Some specimens were sent in by Mr. Priest. They consisted of small, flat platy selenite xls from ¼ up to 1¼ inches in length, white in color though some have inclusions of dark gray clay. Small clusters of platy selenite xls also present, none of the xls fluoresce.

KANSAS—"Starting at the junction of Highways 40 and 81 in the northern part of Salina (Saline Co.), Kansas, go southwest on Hwy. 40 about 6 miles to a road going south, it runs just east of a boys' home. Go south 1.6 miles to a road coming in from the east and a gate on the west. Open the gate, drive in and close the gate. Drive west 0.6 mile to a

quarry on top of the second hill. Here and on the south side of the fence you can find all sizes and shapes of barite roses. (I found a collector's item at this location, it is a large cluster of sand balls which are rare around here when stuck together. You may find singles but few large clusters).

"A new quarry was opened in 1952 south and west of the old one. Either walk over or better drive around to the north to the next road, one mile west of the one you came in on. It is reported that you can find more barite roses of various sizes in this new quarry."—item sent in by Larry Davis, 617 East Ave. B, Hutchinson, Kans.

KENTUCKY—"About a year ago I was on the Milton Hill, near the top (U. S. 421), and found in the gray limestone some interesting dark brown cubes of pyrite. Milton is in Trimble County, Ky., just across the Ohio River from Madison, Ind."—item dated Jan. 6, 1961, from Maj. Raymond Prueitt, Sulphur, Ky.

LOUISIANA—In the collection of Ken Kyte, Box 161, Covington, La., is a 2 x 3 inch specimen of milky opalized wood which he had found in the Sun Gravel Pit, Sun (St. Tammany Parish), La.

MAINE—"Here are some specimens I found while hunting in an old gravel pit at Ogunquit (York Co.), Me. Hope you like them and will tell me what they are."—item dated Oct. 14, 1960, from Frederick E. Kemp, 100 N. Main St., Ogunquit, Me.

Two specimens were received. They consist of dark smoky quartz xls coated by drusy milky quartz on massive smoky quartz and all coated by yellow melanterite. Very interesting specimens.

MARYLAND—"The enclosed rock found lying on surface of road cut made for extension of Falmouth Road in Spring Hill subdivision, Montgomery County, Maryland. Numerous loose bits of rock, green and dark blue, on dirt surface about 30 yards from present end of pavement.

"What rock it it?"—item dated Dec. 19, 1960, from Bruce Houston III, 5133 Worthington Drive, Washington 16, D. C.

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The rock sent in is green serpentine and no doubt the loose rock mentioned, both green and dark blue, is all serpentine

MASSACHUSETTS—"While I was at Canton (Norfolk Co.), Mass., this past October, I found pebbles containing homblende, dark maroon jasper, also poor quality unakite. None were lapidary quality but readers in vicinity who can get to the many gravel pits operating for the state road building program may get better."—item dated Dec. 9, 1960, from Helen L. MacLeod, 4826 Butterworth Pl. N.W., Washington 16, D. C.

MICHIGAN—An attractive green prehnite in dark gray basalt coming from the world famous copper mines of Upper Michigan was sent in by Lyle De Rusha, Rt. 1, Chippewa Falls, Wisc. The locality for the specimen is Central Mine, Central (Keweenaw Co.), Mich.

Small masses of native copper embedded in the prehnite add to the attractiveness of the specimen.

MINNESOTA—The Vermilion Range iron district lies in northwestern Minnesota, in St. Louis, Lake, and Cook Counties. It is from 5 to 15 miles wide and the main iron ore production has been from St. Louis County—the iron ore is chiefly dense bluish hematite.

MISSISSIPPI—We have a beautiful (5 inch diameter) thin slice of grayish-brown petrified wood whose label reads as follows:

"This is a slice of petrified wood that was found on Pearl River in the fossil beds one mile east of Byram in Hinds County, Miss., by Jud S. Locke, 39-48th St., Gulfport, Miss. It appears to be very solid and is harder than the petrified wood found in Forest County, Miss."

MISSOURI—L. A. Yarrington, Norwood, Mo., sent in a specimen which he had collected around Norwood in southern Wright County in Southern

Missouri. It is a green chlorite on whitish quartz.

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MONTANA-From Hjalmer Johnson, prop., Lost Cabin Trading Post, Wibaux, Mont., we have a most interesting specimen, a dark green with reddish spots, 6 inch diam, thin slab. The specimen (granite) consists of green epidote, reddish feldspar, grayish quartz and black

"This comes from a 17 lb. chunk found north of Wibaux (Wibaux Co.), in Devil's Canyon country. It is probably from glacial drift."

NEBRASKA-"Have just been reading in your World News column that you need news from Nebraska. I have been thinking of writing you for some time now but have not found the time as yet. About a year ago I first heard of pyrite being found in a quarry a short distance from Omaha but it wasn't until this Spring that I found the quarry and also found very nice pyrite specimens.

"The quarry is located in Washington County about fifteen miles north of Omaha. The pyrite is found both in the limestone (the quarry is a limestone quarry) and in the heavy black shales covering the lime rock. The pyrite is formed on some sort of concretions I'm not sure what they are. Have found pyrite with crinoid stems intermixed and have found shells covered with pyrite. The quarry is now closed to collectors no doubt the result of too many thoughtless collectors.

"I have cleaned the pyrite in a strong Sani Flush solution and it does a real fine job. The ones found in the shales are

usually quite dirty.

"Perhaps you will be able to use this in the Nebraska news. I have never heard of pyrite being found any where else near by. I also have a few extra specimens to trade if any one would like to do so."item dated Nov. 28, 1960, from Charles M. Schafer, 6310 Military Ave., Omaha 4, Nebr.

NEVADA—An interesting locality for placer gold is the Island Mountain or Gold Run Creek district in northern Elko County of northeastern Nevada. The lotributaries of the Owyhee River, 75 miles north of Elko and about 25 miles south of the Idaho-Nevada line. The district derived its name of Island Mountain from an isolated mountain or monadnock which rises at least 1,000 feet above the surrounding terrain. (Ref. Placer Mining in Nevada, by A. M. Smith and W. O. Vanderburg, Univ. of Nevada Bull. No. 8, Reno, Nev. 1932).

NEW HAMPSHIRE—"We thought the fans of the well-known Palermo Mine in North Groton (Grafton Co.), N.H., will be interested in our find of blue quartz in triphylite at that mine. The only place from where we obtained blue quartz before is from Cornog (Chester Co.), Penn. We are mailing a sample under separate cover."-item dated Jan. 11, 1961, from White Mountain Minerals (E&S Anderson, prop.), Campton,

What an interesting specimen. It consists chiefly of a grayish-green cleavage mass of triphylite penetrated by a thin vein of pale bluish glassy quartz.

NEW JERSEY—"I am sending a small piece from a couple of large boulders found high up on top of the Buckwheat dump at Franklin (Sussex Co.), N. J. There seems to be a lot of this material in one spot at the far left of the dump as you go into the dumps. Can you tell me what it is?-item dated Dec. 3, 1960, from William Sherpinsky, 1528 E. Duval St., Philadelphia 38, Pa.

The black-brownish-pinkish mass consists of black franklinite, brown garnet (polyadelphite), pink rhodonite, white calcite, and bronzy phlogopite. The specimen is an attractive one due to the bright

colors of its minerals.

NEW MEXICO-An interesting xline white calcite was sent in recently by Miss Carol Schlegel, 10121 Regatta Ave., Whittier, Calif.

"It was collected near the ghost town of Mogollon (Catron Co.), N. Mexico"

-on label.

NEW YORK-From the famous tourmaline locality at Pierrepont (St. Lawrcality is on Gold Run Creek, one of the ence Co.), N. Y., we have a small but

very brilliant black tourmaline xl sent in by Richard C. Johndy, Cascade Road, Lake Placid, N. Y.

"The tourmaline xl, as you may well know, is from the classic location in Pierrepont, New York, where the xls are unique in that they have a stubby form (short prism faces) and are shiny black. The xls found there range in size from about 1/16 of an inch up to golf ball size and perhaps larger. Most are found loose in the soil, but nice matrix specimens can also be found. Perfect ones (showing all faces) are scarce, as most xls have one or two frees missing. I have seen one very choice xl having all faces almost the size of a golf ball, and shiny black."—on label.

NORTH CAROLINA—"I am sending you a specimen of a new find that I have made and do not know what it is. The location that it came from is about 2 miles from Saluda (Polk Co.), N. C. on Pacolet River. There is some greenbanded jasper associated with this material. The jasper is very hard to find but there is some there."—item sent in a few months ago by W. J. Martin, Jr., 217 Forest St., Greer, S. C.

The specimen received is a fine grained grayish-green quartzite of gem quality (judging from the large attractive cabochon attached to the rough piece).

NORTH DAKOTA—In the terrain around her home, Florence Newsome, Hurdsfield, N.D., has been finding many interesting pebbles. One of her recent finds was black lustrous hornblende.

Hurdsfield is in S.W. Wells County which is in central North Dakota.

OHIO—From Brownsville (Licking Co.), Ohio, we have 2 specimens of grayish flint (stained; brown) that were sent in by Maj. Raym and Prueitt, Sulphur, Ky. They are both very attractive, the larger is a rough mass while the smaller is a one inch cabochon in which part of the staining is in the form of a ship's anchor—"See the anchor resting on the bottom of the sea."—on label of this unique 'gem'!

OKLAHOMA—"I am sending you a xled nodule which I found about 3 miles north of Stillwater (Payne Co.), Okla, on a side road just off of Hiwy 60. It came from a roadside ditch. Sent some to Neal Yedlin to see as to crystallization for micromounts.

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"Seems to be two or three different calcite xls in them. The nodules run from ½ inch or less to about 2 inches. Permian redbeds sandstone.

"Fluorescence under short wave is an orange-red.

"There is another bed of calcite lined nodules about 20 miles west and they fluoresce pink, yellow, blue. These are smooth coated brown, where the others are Permian redbeds sandstone and run much larger. This bunch runs from ½ inch or less to 2 inches."—recent item from Glen E. Kiser, Douglass, Kans.

The specimen is a brown nodule whose center is colorless calcite xls that fl. orange-red—very nice.

OREGON — "Antelope, in Wasco County, Oregon is a well-known field that has been a heavy producer of semi-precious gem materials. One of the most valuable single specimens found here was a 300 pound crystal-lined geode, found in 1934, and valued at no less than \$200.00."—The Gem Minerals of Oregon, by Dr. H. C. Dake, (1938), 329 S.E. 32nd Ave., Portland 15, Ore.

PENNSYLVANIA—"At the Brenner (City Mill) Quarry in Lancaster (Lancaster Co.), Penn. we found some golden rhombohedral calcite, some in peculiar 'half-moon' shapes.

"The limestone here is very slaty and impure, and shows ripple marks. The effects of crumpling and faulting can also be studied in this quarry."—a recent note from David F. Hess, Box 269, F&M College, Lancaster, Penn.

RHODE ISLAND—"From the area occupied by a small hill in back of Wansbuck Mills, Providence (Providence Co.), R. I., came three rather unusual quartz xls. Many of the quartz xls from this locality possess a light smoky phan-

tom and others are unusually misshapen.

Almost all of the xls have small amounts
of a green inclusioned mineral, probably

chlorite.

"The occurrence is small, limited to a few milky quartz viens but having num-

erous cavities.

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"Enclosed you will find 4 xls, 2 having a smoky phantom, 2 misshapen."—item dated Jan. 5, 1961 from John E. Ostrowksi, 50 Cypress St., Providence 6 R. I.

What interesting xls these are, All are smoky quartz xls and all doubly terminated. Two are 1½ inches long, the others are 1 inch and ½ inch. The phantoms are plainly visible but no green inclusion was present. The one inch specimen is a flattened xl—must have formed in an unyielding crevice so that it had no chance to grow naturally.

SOUTH CAROLINA—From a locality near Aiken (Aiken Co.), S.C., we have a dark brown botryoidal mass of limonite that was sent in by Yates Donnan, 52 College Acres Dr., Aiken, S.C. The locality is in the Horse Creek Valley which lies between Aiken, S.C., and Augusta, Ga. Horse Creek Valley is approx. 10 miles long and 5 miles wide, so Mr. Donnan informs us.

SOUTH DAKOTA—Robert J. Smith, Rt. 2, Box 190, Puyallup, Wash., sent in an interesting mineral—a whitish lepidolite on white microcline.

"It comes from the famous Etta Mine (pegmatite ) in Keystone (Pennington

Co.), S. Dak."—on label.

TENNESSEE — "Please identify the enclosed specimen. The specimen comes from a large rock which I found on the dump at the copper mine at Copperhill (Polk Co.), Tenn." item dated Dec. 22, 1960, from Randy Gresham, 1504 Shorter Ave., Rome, Ga.

The specimen is white, fibrous, lustrous scapolite. It fl. red under L.W.

TEXAS—From a locality west of Fort Worth (Tarrant Co.), Texas we have a pink breccia that was sent in by Miss Carol Schlegel, 10121 Regatta Ave., Whittier, Calif. UTAH—Black, petrified wood has been found near Heber (Wasatch Co.), Utah.

VERMONT — From Westminster (Windham Co.), Vt., we have a number of odd-shaped gray claystone concretions. Another odd fact is that they are all flat—some are almost platy. Still another odd fact is that some are full of tiny, silvery-white muscovite which sparkle in the sunlight. We are indebted to Mrs. Louise Mullen, 24 Chestnut St., Brattleboro, Vt., for these unique concretions.

VIRGINIA—"I found these stones on my farm. What are they and are they of value?—item from Ray Ben Gillispie, Rt. 3, Box 107A, Appomattox (Appomattox Co.), Va.

The stones are small smoky quartz xls (one of them drusy) and are of no commercial value, only as mineral specimens.

WASHINGTON—"Will you prease identify the enclosed specimen? It comes from a stone quarry near Spokane (Spokane Co.), Wash." — recent item from Robert J. Smith, Rt. 2, Box 190, Puyallup, Wash.

Specimen is a massive, lustrous, dark

bronze-brown pyrrhotite.

WEST VIRGINIA—"Will you please identify the enclosed stones? They were found inside the city limits of Bluefield (Mercer Co.), W. Va., in the banks of U.S. Highway 52-21.

"The stones are as I found them. Some were completely incased in limestone and are egg-shaped. They are hard and will take a polish."—recent item from Blake K. Phillips, 224 Briarcliff

Rd., Spartenburg, S.C.
The stones are dark gray chert (quartz).

WISCONSIN—"As Wisconsin is covered with a mantle of glacial debris in the northern half of the state and Cambrian sandstone in the southern, collecting areas are confined to the outcrops that occur in the various counties such as Iron County. At the Cary and Montreal mines, hematite and magnetite are the ones mined.

"These mines are located near the city of Hurley (Iron Co.), Wisc. The collecting is a lot better just over the border in Michigan at Wakefield, Bessemer and Ramsey where many of the iron minerals may be found."—item sent in by Lyle De Rusha, RR 1, Chippewa Falls, Wisc.

WYOMING-"A friend of mine who lives in Sundance (Crook Co.), Wyo., sent me a fairly large chunk of rock and asked me to help him identify it. I have tried, but am not sure of myself. Enclosed is a piece of it which I hope you will be able to identify. It is fairly soft, I estimate it between 5 and 51/2. It saws easily and takes a fair polish. Referring to my reference books the only thing I came up with was opal. But the black color and lack of what I consider opalescence, has thrown me. What do you call it?"-item from Spencer L. Freeman, M.D., 115 E. Washington St., Kirksville, Mo.

The specimen is moss agate in which the chalcedony is so heavily penetrated by black manganese that it appears to be a solid mass of manganese and this may account for its softness.

CANADA—"Here is a surprise for you! A scapolite xl that fluoresces red. If you care to publish this one in the next World News, I guess a lot of crystal and fluorescent mineral collectors will be interested too.

"So far I never heard of red fl. scapolite, did you?

"I found a number of them, seldom larger than 2", but one weighing 13 lbs., in the Gatineau Park, north of Hull, Quebec, Canada. Curiosity paid off again, and it usually does, when you are hunting rocks in the Canadian bush. There is always something new around the next corner."—item dated Dec. 6, 1960, from Ernest Windisch, prop., Champlain Rock Shop, Box 31, Philipsburg, Que., Canada.

What an interesting surprise—the first fl. scapolite we ever saw although we have heard of them. The crystal is 1¼" long, gray white in color, of good quality, and fl. red (L.W. only).

GIBRALTAR—"For sometime I wanted to send you the enclosed piece of rock which may be of interest to you.

"Actually it is stolen property as it is a portion of a much larger piece of very great value—so much so in fact that no private collector can ever hope to achieve it for his collection as it is not for sale and in any case no private person could afford to purchase it and it is guarded day and night.

"You may wonder how this priceless piece could even be approached let alone allow a portion to be stolen under the very noses of the guards.

"There are many not allowed to even view it in detail but being a respectable British subject, extra privileges were allowed and the piece is so large that I was able and allowed to enter some of the many crevices and whilst in one of these I purloined a portion which I enclose herewith.

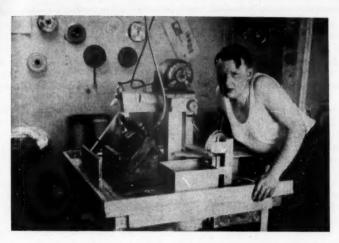
"Yes: it is a portion of the Rock of Gibraltar."—recent item from Kenneth Parkinson, F.G.A., (Gemmologist), 11 Fitzroy Street, Hull, England.

This "valuable" specimen is a small, xline, amber colored calcite neatly mounted on red cloth in a 1½ x 2½ box. It is a very appropriate representative from the great limestone Rock of Gibraltar. The calcite fl. lemon-yellow, especially good under S.W.

KOREA—"I am sending you some specimens from South Korea which were collected in the summer of 1960 by my young friend, Pfc. Adam Kokot of Chicago (now in the U. S. Army). The specimens were found in outcrops in the valley of Imjen River near Munsan north from Seoul, South Korea."—item dated Jan. 10, 1961, from Tomasz Turley, 2101 N. Kedzie Ave., Chicago 47, Ill.

The specimens consisted of thin silvery muscovite plates on massive milky quartz, flesh-colored pegmatite, and blackish, thin platy mica schist. All very interesting.

MEXICO—From the silver mines of Taxco (Guerrero State), Mexico, we have



C. B. F. Helsloot in his lapidary shop which he built himself

an intensely interesting specimen consisting of grayish masses of pyrargyrite, coarse xline lead-gray galena, and tiny brassy-yellow pyrite xls. This specimen was sent in by John S. Albanese, P.O. Box 221, Union, N.J.

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"Pyrargyrite, with galena, pyrite. Santa Gertrudis Mine, Taxco, Mexico." — on label.

NETHERLANDS—From C.B.F. Helsloot, J. V. Lennepkade, 155, Amsterdam 13, Netherlands, we have a nice red agate pebble which he collected in the Veluwe ("barren island"), a sandy tract (now a National Park) to the north of Arnhem in central Netherlands.

SCOTLAND—Arch Forrest, 1381 Pollakshaws Road, Glasgow 1, Scotland, is in Austin, Texas, visiting his son. We were to meet him Dec. 20th at Idlewild Airport, New York City but were prevented due to a heavy snowfall which paralyzed traffic around Peekskill, N. Y.

From Mr. Forrest we have a most interesting specimen which came from Boylston quarry, Barrhead, Renfrewshire, Scotland. It consists of native copper with white calcite and green prehnite on dark gray basalt.

SPAIN—From Spain's most famous silver mines located at Hiendelencia, Guadalajara Province, in central Spain, we have a beautiful specimen of massive brassy-yellow chalcopyrite in massive dark smoky quartz, sent us by Juan Montal, Plaza Sgdro Corazon 1, Vilafranca del Panades, Spain.

## MINERAL DISPLAY CREATES GREAT INTEREST!

Editor R&M:

We read with interest the item in your January-February issue which the Summit Trust Company of Summit, N. J. sent to you regarding our display in their bank.

They advised us that they have never had a display that created as much interest as this exhibition, and brought so many people into

the bank.

As a result of the display we have received requests from other banks for a similar exhibit. We placed one in the Broadway Bank & Trust Company in Paterson, N. J. from January 16th to the 30th, and they have informed us that it attracted new and old customers alike.

This has all been very gratifying for we feel that the results were beneficial not only to the banks and ourselves, but educational as well

to the spectators.

Murray American Corporation Mrs. M. Jastram Mineral Department 15 Commerce St. Chatham, N. J.

# THE MICRO · MOUNTER

Conducted by Neal Yedlin-129 Englewood Drive, New Haven, Conn.

We receive many letters requesting fundamental and beginning information regarding the making and collecting of micromounts. We appreciate that a column such as this has had a great deal to do with the popularity of the m/m art. We flatter ourselves into believing that these notes, begun in 1948, have been an important factor in the resurgence of popularity of this phase of mineral collecting. But we do feel that repeating, periodically, the basics of the hobby, while of great importance to beginners, might be repetitious to those who have been following the column since its inception, or for a good part of its life. What to do? Yes, what to do, in view of the fact that back issues of ROCKS and MINERALS are available, and a reprint of Dr. Wills' fine article "The Preparation of Micromounts" can be obtained from The Baltimore Mineral Society or ROCKS and MIN-ERALS for fifty cents. Tho somewhat dated, it yet contains all the basic information needed.

But in each column we'll try to include some fundamentals. New to beginners, and refreshers to the initiated. And in about a year or so we hope to have published "Minerals in Miniature", a manual for the micromount collector. (Just don't hold your breath.)

A couple of years ago Phil Cosminsky, 303 No. Virginia Ave., Falls Church, Va., sent us an almost unbelievable specimen. It came from the Lower New Street Quarry, West Paterson, N. J., now, unhappily, the site of a factory building. PECTOLITE, PSEUDOMORPHIC AF-TER QUARTZ. Perfect hexagonal prisms, terminated by plus and minus rhombs, but of matted white compact fibres instead of quartz. This was a beautiful m/m specimen, worthy of anyone's collection, yet, like the man who attended the circus for the first time and saw the giraffe-"I don't believe it. There's no such animal." We never did come across any reference to this material until we browsed thru some copies of the "Mineral Collector", specifically the issue of January, 1909. In it, Dr. A. C. Bates, in discussing the F. A. Canfield collection of minerals. among other things says, "The West Paterson minerals are nicely represented. Once we heard much of 'quartz pseudo after pectolite'. ..... Here is a fine specimen of well formed quartz xls turned into pectolite." This, obviously, was a cabinet specimen and not micromount material. Dr. Bates goes on to say anent the Canfield collection-"No city in the State (N.J.) has what may be called a public museum. (This was 1909, remember.) Newark, the largest city, should have one. And when she does the Canfield collection of minerals should be placed in it. The Canfield collection must not be permitted to go out of New JerCent

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Ah, but Jerseyites must be disappointed, tho the rest of the nation is not. This fine collection was given to the Smithsonian Institution, and together with the Roebling collection formed the basis of what is probably the world's finest assemblage of minerals.

We shall seek the pectolite pseudomorphic after quartz the next time we visit Washington, D. C.

One of the boys in the newly organized Asheville, N.C. micromount society has already contributed to the art. For mounting single xls he uses the teeth of a clear plastic comb. They take cement (Duco) beautifully and hold tightly to the plastic box.

Try Bon Ami spray detergent for cleaning specimens. Spray it on-rinse it off.

Works wonders,

A long letter from Peter Leavens, 70 Central Ave., New Haven, Conn. We'll give you part of it now and part in a later column. Dated January 28, 1961.

"Dear Mr. Yedlin. Lately I've been concentrating on localities at which I can collect in person. I get quite a variety of things-summer at home in Jersey, within easy distance of Franklin and the Watchung trap quarries, and the rest of the year in New Haven, with the central Conn. pegmatites virtually at my door.

'At Franklin, one now buys a pass for a dollar, obtaining permission to collect on the dumps of the old Buckwheat mine. In return the town turns the dump over a couple of times a year, exposing new material. Last time I was there I picked up about 30 pounds of dolomitic limestone. This material is loaded with vugs and small pockets. It is from here that my specimens were derived.

APATITE: One clear white xl, showing base, first and second order prisms, and first, second and third order pyra-

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ARSENOPYRITE: Several xls, including a small trilling, on a cleavage surface in dense, nonporous grey dolomite.

BROOKITE: Four xls. Three from one specimen were black, associated with goethite; the fourth was pale brown, transparent, and coated with red powdery iron oxide.

CALCITE: Rounded xls, showing, I believe, m and e (prism and low rhomb), and some pseudo-octahdral xls which I haven't been able to interpret. (Ed. Note: Get in touch with Alex Knoll, 532 Edgar Rd., Westfield, N.J., who analyzed such xls.)

DOLOMITE: Rhombs in just about

every pocket.

GOETHITE: Common as black needles, occasionally in slender prisms, and as brown radiating tufts of hairs clinging to other minerals.

HEMATITE: One tabular xl showing the common combination of base and rhomb.

QUARTZ: Abundant in seams and pockets in the dolomite, altho almost unknown from the ore body. Sometimes shows the "s" face.

PYRITE: Pyritohedra, tarnished, often showing traces of other xl forms.

SPHALERITE: Resinous brown tetrahedra, often twinned. Isolated brilliant

This makes 10 species, all crystallized, all suitable for mounting. Not bad for

one trip. (signed) Pete.

To this we say "Not bad, indeed." We'd like to add to the list. From this same dolomite we have ankerite, celestite, chalcopyrite, fluorite, gahnite, graphite, hemimorphite, millerite (?), microcline, and rutile, Doc. William Thomas, of Lyons, N.J., says he has many more. Which proves that altho Franklin is closed, to a m/m collector it is still a live

collecting region.

To our notes on anatase in the last column, add another New England locality. Fred Perkins, of Littleton, N.H., sent us some seam quartz, with orangebrown xls of anatase on and in the quartz. The xls show dominant striated pyramids, with small base. From a road cut (superhighway 93) 1 mile south of the hospital at Littleton. He says the ledge has been covered with soil and seeded, but thinks the spring rains may uncover it. This requires critical timing.

Sometime ago Bill Henderson, 228 Sylvan Knoll Rd., Stamford, Conn., came up with a mess of similar seam quartz from Thomaston dam, Conn. Here, too, was anatase. Blue xls, extremely small, transparant, lustrous. Several habits were exhibited, the prime one being the dominant base, with extremely small pyramids, making the xls appear tabular. He still has some, and is in a swapping mood. Your 'scope needs 40X to enjoy this one.

Micromount collecting was extremely popular in the early part of the 20th century. Browsing thru the old "Mineral Collector" we note many ads, articles, and ideas devoted to the collector of this type of specimen. One, however, puzzles us. Roy Hopping, a dealer and collector, at the bottom of his full page ad for minerals, had the following: "Microscopic mounts in society size (his italics) Rakestraw boxes. 25c each ... Send for approval ..."

Now what in the names of J. D. and E. S. Dana are "society size" boxes?



Beach sand from Pigeon Point Lighthouse, Calif.

Mrs. Paul Schuder, Rt. 1, Box 1155, Woodland, Calif., sent in this sand which was collected from a beach on the Pacific Ocean near Pigeon Point Lighthouse in San Mateo County, Calif.

The sample is a medium grained, pale reddish sand consisting chiefly of quartz (colorless to pale smoky) and sea shells (brown, white) with small amounts of black magnetite and black ilmenite.

"A whole new world has opened up for me since I started to collect sands." —on label.

Pigeon Point received its name from a clipper ship named the "Pigeon" that was wrecked on the point over 100 years ago.

Obsidian sand from Black Sand Beach, Hawaii Father Felix Nolte, O.S.B., St. Benedict's College, Atchison, Kans., sent in this sample which comes from Black Sand Beach on Hawaii Island, the largest island of the Hawaii group.

The sample is a fine grained, black lustrous sand consisting entirely of black lustrous obsidian.

"I think this sand should be very interesting, as coming from our newest State and from near the world-famous Kilauea Volcano, on Hawaii, the largest of the island group. The sand comes from the area known as Black Sand Beach, just south of the eastern nose of the triangular island."—on label.

Muscovite sand from Curtis Corner, Me.

"Here is an item for R&M. There are no references as far as I know to the 3 places at or near Curtis Corner, Maine, just southwesterly from Amdroscoggin Lake where gold was taken probably 100 years ago. Sending you a sample of sand taken from a pocket in wall at one of these prospects. All these prospects are close to highway, about 2 miles apart. Would be glad to take anyone who might be interested altho I doubt if any suitable Minerals can be found."—item dated Dec. 4, 1960, from Chester W. Doggett, Monmouth, Maine.

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The sample is a medium grained, silvery-gray sand consisting of silvery-white muscovite, smoky quartz, and some altered mineral stained brown by limonite. No gold could be spotted. Curtis Corner is in Amdroscoggin County of S. W. Maine.

Pink sand from Cushing, Okla.

Some few months ago we received this sand sample which is a fine grained pink sand consisting almost entirely of pink quartz plus a few flakes of silvery muscovite.

"Sand from Hwy 39 (hill above Cimarron River west of Cushing), Payne Co., Okla."—on label of sand that was sent in by Glen E. Kiser, Douglass, Kans.

Heavy sands from Horse Creek Valley, S.C.

"Under separate cover I am sending you the following sand samples:—ilmenite (black), monazite (pale brown), rutile (black), staurolite (dark brown, almost black), and zircon (colorless to brown). These samples were given me by the Heavy Minerals Co. which now has closed operations in this area.

"Here is a general description of this locality (Horse Creek Valley).

"Travel U. S. Hwy #1 from New

York City to Miami, Fla., and you will have passed through part of Horse Creek Valley probably without knowing it. The Valley, which is approximately 5 miles wide and possibly 10 miles long, lies between Aiken, S.C., and Augusta, Ga., in an area which is slightly south of the 'fall line' which divides the two physical provinces, the Piedmont region to the north and the Coastal Plain to the south.

"The valley has been carved by nature from a giant sedimentary formation which was formed during the Mesozoic era and is the oldest of the Coastal Plain sediments. The formation called the Tuscaloosa lies uncomformably on a crystalline basement of granite and consist of coarse micaceous quartz sands and gravels mixed with kaolins and clays of red, vellow, white, and purple colors. Many minerals have been identified in the sediments, such as: garnet, tourmaline, nutile, zircon, staurolite, ilmenite, and monazite. The greatest concentration of heavy sands are found in the low places and in Horse Creek which passes through the Valley and then into the Savannah River. One may collect sand samples very easily in Horse Creek with a bucket or shovel."-letter dated Aug. 21, 1960, from Yates Donnan, 52 College Acres Dr., Aiken, S. C.

Horse Creek is in Aiken County of western South Carolina. All of the sands

received are fine grained.

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Quartz sand from Fatima, Portugal
Mr. and Mrs. Paul O. Drury, 17965
Arbolada Way, Tustin, Calif., recently
toured Europe, Africa and the Holy Land
and a number of sand samples were collected for us. One sample was collected
from the vicinity of the Shrine of Fatima, in Portugal. This sample is a coarse
grained, pale brownish sand that consists
entirely of quartz (colorless and white—
much of it is stained pale brownish by

Fatima is in the western part of Portugal, about 105 miles N/E of Lisbon, the capital and chief seaport of the country.

Beach sand from Largs, Scotland Largs is on the Firth of Clyde in southwestern Scotland. From the beach in Largs we have a sand sample that was sent in by Sandy Ramsey, 1015 Aikenhead Road, Kings Park, Glasgow S4, Scotland.

The sample is a medium grained, dark red sand consisting of smoky quartz, pinkish feldspar, red hematite, black magnetite, and whitish sea shells. It is the preponderance of the red hematite which gives the sand its red color.

Quartz sand from Ephesus, Turkey

Ephesus, now known as Ayasoluk, is in western Turkey about 36 miles south of Smyrna (Izmir). Ephesus is an ancient Greek city famous in biblical days. From Ephesus we have an interesting sand sample that was sent in by Glen E. Kiser, Douglass, Kans. The sample is a coarse, grayish sand consisting of smoky quartz, pinkish to grayish feldspar, and grayish mica schist.

"From site of Mary's last home near old Ephesus."—on label.

#### WILL SWAP!

Glenn Jackson, 2836 Ione St., Sacramento 21, Calif., wants some solid black hematite (for cutting). He is willing to swap for it California & Nevada jasper & agate, palm wood, and California jade.

#### "CAMP FIRE THOUGHTS"

It comes to me by my Campfire tonight
In this Torrid Windswept Land . . . that
'Dust Devil' has left many 'footprints'
On the Deserts' rippling Sands . . . since
First I took that elusive Trail
That leads (some few) to Gold . . . and
It comes suddenly . . . rather a shock . . .
You know . . . I am growing old!

The active Days held a promise .... Whispering breeze, thru the night Also promised that, perhaps tomorrow, Will give us that one big strike .... Forty Years I have followed 'Canary' That one 'bonanza' we've sought: Though we just managed Bacon & Beans, We have never regretted our lot.

Hear the whispering night wind; the Desert Bright Sands are whispering too .... while Yellow Moon comes fingering thru The weird, grotesque Families of The Cactis' varied Clans .... If I should pick the place to be .... I would be just where I am.

R. A. Richards Morristown, Ariz.



# WOMEN'S CORNER OF R & M

Conducted by Winnie Bourne c/o Rocks and Minerals Box 29, Peekskill, N. Y.

# A BOMB DID IT!

Dear Winnie:

Please renew my subscription to your fine magazine, for which I enclose my check for \$3.00. I received it as a Christmas gift from my brother-in-law in 1959, and enjoyed it all year long. Have learned so much from it. The always interesting articles by your many contributors, have done much to further a hobby which really began over 10 years ago, when my husband, in excavating for the cellar drains in our new house, dug up a Limonite "bomb" geode lined with Goethite. We kept it as a curiosity for some years. Then a few years ago, we bought several loads of rock from a nearby limestone quarry to build a stone retaining wall, and found other minerals in it.

Curiosity got the better of us, so we gathered samples of each one, and the Geode, and took them to the North Museum, at Franklin & Marshall College in Lancaster, Penn., where they identified them as quartz, calcite, pink dolomite, purple fluorite, chalcopyrite, pyrite, and of course, the "bomb". They have quite a large one on display there, with an electric light in it which was dug up a mile or two down the road from here. We bought a copy of "Rocks & Minerals" (Zim & Shaffer) and thus began a most interesting hobby, still in its infancy.

Sincerely Mrs. Russell M. Spahr Columbia R#1, Penna. Ar

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#### **MEMORIES OF NOVA SCOTIA!**

Dear Winnie:

Had a splendid few days last summer in Parrsboro, Nova Scotia, Canada, reviewing acquaintances with the folks and the shoreline. Hunting minerals was good and long visits with Eldon George and his mother have given us memories for many months to come. Had a good day at West Bay with the Dubois from Mexico, Maine, and have some nice orange gypsum to prove it. The hunting was

good I never could have made it up the bank without help from George.

Eldon George has a lovely new shop and evenings were spent pouring over his wonderful collection of Nova Scotia minerals. Also the evenings around the fireplace at the Ottawa House will long be remembered. The Wheatons are wonderful hosts.

Sincerely, Jean Brander, 1352 Catalpa Ave. Chicago 40, Ill.

#### **EASY FOR A YOUNG GIRL!**

Editor R&M:

I received my first copy of R&M a couple of weeks ago and I like it very much. What I like most about it was that it was easy for me to understand.

> Susan Tracy 4045 Judy Ave. Salem, Oregon

# EMERALD — BIBLICAL SYMBOL FOR KINDNESS

"The Emerald has held significance for man over the past 6,000 years. It was the Biblical symbol for kindness. In the Middle Ages, it was believed that a seer could gaze into the depths of the jewel to solve domestic problems."



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# Fossil Department

Short items on fossils and their localities are wanted.

Please send them to the

Fossil Department (Rocks and Minerals), Box 29, Peekskill, N. Y



ARIZONA—From Clifford H. Earl (Museum of Fossils), Box 144, Sedona, Ariz., we have an interesting reddishwhite coral fossil. Mr. Earl specializes in fossils and the one sent in is a good example of what is in his stock.

"Coral, Hexagonaria percarinata (Sloss). Devonian Period, Camp Verde (Yavapai Co.), Arizona."—on label.

ILLINOIS—"Under separate cover I am sending you a specimen of fossilized snail from the strip mines of the Midland Coal Company of Farmington (Fulton Co.), Illinois. It is a marcasite replacement of the calcium shell, detailed even to the ridges and scars of the original shell. These snail fossils are found in a four inch layer of Pennsylvanian shale which tops the coal seam.

"To reach the site take Illinois 116 west out of Peoria to Farmington, a distance of 23 miles. Still on 116, drive out of Farmington to the second asphalt road on the right. Turn right onto the asphalt and follow it past the maintenance buildings into the stripped area. This road ends at the collecting site. Permission has always been granted in the past, but it would be better to ask.

"I have a quantity of these marcasite snail fossils to trade. I invite correspondence and assure a prompt reply, anytime." —Roger Bender, B-20 Cardinal Court, Normal, Illinois.

A beautiful one inch, dark bronzybrown fossil was received. It is a very fine example of a mineral (marcasite) replacing a fossil (snail).

MISSISSIPPI—Mrs. Emma Sue Tucker, Route 3, Box 103, Oxford, Miss., surptised us recently with a gift of most interesting fossils from her state. There are 23 specimens in the lot, all nicely mounted in a 7 x 10 inch shallow box with cover, and every fossil labelled, with

name and locality. There were sharks teeth from near Booneville, crinoid stems from near Tupelo, baculites from New Albany, crab legs from New Albany, etc. Mississippi is quite a state for fossils.

"I have much larger specimens of all this stuff but most of it is mounted and in cases, but I do hope you will find a place for my small gift. I am kept busy trading with fossil, rock, mineral and shell collectors. It certainly keeps me on the go writing letters and mailing packages but I love every bit of it."—note from Mrs. Tucker.

NEW HAMPSHIRE — From White Mountain Mineral Shop, Campton, N.H., we have an interesting fossil specimen crinoids and sea shells in gray flint.

"Fossils in flint from West Campton (Grafton Co.), N.H."—on label.

NEW JERSEY—"Enclosed are some samples of rock which contain some type of fossil. As you can see, the fossils are blue in color and are much harder than the surrounding rock. I have not been able to identify them, since I know very little about fossils.

"These specimens were found in an outcropping of earth and rock on the road which crosses Deep Cut Hill, near Hazlet and Holmdel (both in Monmouth Co.), N.J. The site is located near the Army radar installation on the top of the hill, but is not on government property.

"I think you may be interested in these fossils and you can add them to your collection as I have others. Also found in the same rock are solid cylindrical structures which may be fossilized plant stems."—letter from Robert W. Morris, 31 Wilson Ave., Matawan, N.J.

The blue streaks and masses are vivianite and they occur in dark green glauconite (stained brown by limonite). The long cylindrical masses are fossils known as belemnites (some of the belemnites are replaced by the blue vivianite).

PENNSYLVANIA—Fossil footprints of long extinct amphibians occur in red shale near Pottsville, Schuylkill Co., Penn.

SOUTH DAKOTA—From Edgemont, Fall River Co., S.D., we have some interesting belemnites that were sent in by Mrs. Edwin P. Olson, Beresford, S. D. The fossils varying from tiny up to one inch in length, and from light gray to dark gray in color, occur imbedded in dark gray marly limestone.

"We dig in the ditches for these fossils"—note from Mrs. Olson.

MEXICO—CHIPS AND FACETS is the official journal of the Miami Mineral & Gem Society, Box 241, Allapattah Sta., Miami 42, Florida. On page 6 of the Jan. 1961 issue of CHIPS AND FACETS appears the following item:

#### OBITUARY NOTICE Ralph ("Pappy") Lieser

It's with deep sadness that I write to inform readers of R&M of the passing of Ralph "Pappy" Lieser of "Pappy's" Beryl Shop, in East Hampton, Conn. on November 17, 1960 much to the sorrow of the many who knew him. He had suffered from a bad heart for some time. He will be greatly missed in mineral circles as he was an inveterate prospector and founded many new areas for gem beryl in the area especially in the Turkey Hill region.

He was a member of the Hartford, New Haven and Middlesex County Mineral Clubs, He was a dear friend of ours and we are going to miss him immensely. Mrs. Julia Lieser is for the time being going to keep the shop open, so do hope our fellow rockhounds

will drop in to see her.

Bob Gallant, Gallant's Mineral Shop Box 32 Moodus, Conn.

R. C. Romanella (Commercial Minerals Corp.), 22 W. 48th St., New York 36, N. Y., has opened an exclusive mineral department and will carry in stock fine quality mineral specimens. Prices will be reasonable, some specimens selling as low as \$1.00 each.

The company is also in the market to buy good mineral collections,

"Frank Stoutenburg's varied collection now includes a giant fossil tooth of a Mastodon that roamed over Mexico many centuries ago.

"The tooth, which measures 6½ inches long by 3 inches wide by 3 inches high, and weighs 3 pounds, was discovered imbedded in the mud of a newly exposed island that appeared when the water level of Lake Chapala, which is 5,000 feet above sea level, was lowered 20 feet to irrigate the surrounding valley below.

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"Also taken from the island before it became submerged again when the lake's water level returned to normal, was a complete jaw of a Mastodon.

"Lake Chapala is Mexico's largest lake, being 54 miles long and 8 to 10 miles wide, and with an altitude of 5,000 feet.

"The Mastodon tooth was a gift to Frank from a friend in Tampa, who makes periodical visits to Mexico."

#### HOW PALACHE'S REPORT WAS REISSUED!

Editor R&M:

In the December issue of Rocks and Minerals, Mr. Robert Jones incorrectly attributed the reissue of Palache's "The Minerals of Franklin and Sterling Hill, Sussex County, New Jersey" to the Franklin-Ogdensburg Mineralogical Society.

This report, which is an essential guide to all Franklin collectors, had not been available for many years at any price. Persuading the Government Printing Office to republish the report was a wonderful accomplishment and I personally, the members of our Club and all Franklin collectors everywhere, owe a debt of gratitude to the persons responsible.

gratitude to the persons responsible.

In the Fall of 1959, our good friend and neighbor, the North Jersey Mineralogical Society, undertook this task as an official project. Mr. John Wiegand, a former officer of the Club, received the specific assignment. He solicited the aid of his Congressman, the Honorable Gordon Canfield, who cooperated magnificently. After considerable correspondence with several Government Bureaus, a new edition was approved and published in the Spring of 1960. Mr. Wingand, Mr. Canfield and the North Jersey Mineralogical Society deserve full credit for a job well done.

Frank Edwards, President Franklin-Ogdensburg Mineralogical Society Box 146, Franklin, N. J.

## A MINING VACATION AT COWEE. N. C.

By ORLIN R. HEALY and FRANK P. HEALY 107 W. Sunrise Hwy, Freeport, N. Y.

First a word of gratitude to ROCKS & MINERALS for the service rendered in several of its previous issues by the mentioning the possibility of obtaining some fine Ruby and Sapphires in the Cowee Valley of North Carolina.

Also due to your publication, the wife and I purchased John Sinkankas' book, GEMSTONES of NORTH AMERICA. Starting on page 48 everything that we had read in R&M was confirmed and by now our curiosity was more than aroused. We decided then and there to plan a

Mining Vacation at Cowee.

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After much letter writing and inquiries as to where to start this vacation, we were advised to drive to Highlands, N.C. or to Franklin, N.C. Both are in the extreme southwestern part of the state.

The latter town has about nine modern Motels and all are within a twenty minutes ride of a dozen mines where real gem material may be found. Good food and amusement can be had in Franklin, also good shopping is available.

The Motel owners will direct you to the mines, where a fee of \$2 per head is charged. We suggest that you try several mines and not spend all your days at one spot. Unlike most mining locations you can drive directly to the spot where you mine and no climbing is necessary. In fact if you do not care to shovel and dig, these mines have boys who will bring you six buckets of Gravel for \$1.00. Sieve Boxes are supplied and you will find Sluice Boxes with a good flow of water, without additional charge.

Our quest was for Sapphires and Rubies because we had heard that some very fine large stones had been found at the Ruth Holbrook Ruby Mine so we

started there and had such fabulous results that this experience wil linger with us forever. We washed about 30 buckets of Gravel a day and Ruth gave us lessons on how to detect the good stones from the worthless ones. Without proper instruction you would pass over valuable material as it takes some skill to detect, the first day you try washing these gravels.

Must say that all the mine owners were extremely courteous and all but one mine was productive. Besides sapphires and rubies we also obtained fine crystals of Beryl, Rhodolite Garnets, Rutile, Quartz, etc. At the Ruth Holbrook mine we collected about 30 fine Rubies from 1/4 carat to 93/4 carats and over 50 Sapphires from 1 to 11 or more carats. Some of the latter have Stars and are in several colors, as bronze, black, blue, gray, etc. Several shades of pink were just beautiful.

We were advised at Cowee that Archie Jellen, Lapidary, of Highlands (21 miles from Franklin), specializes in these North Carolina stones, and has hundreds of finished gems, all mounted, and on display. You should see them for a furthering of your gem education. The drive to Highlands from Franklin on Route 64 covers some of the most interesting scenery in the East. One drives on a winding mountainous road (3900 ft) up to Bridal Falls where you drive your cars directly under the Falls and then to Cullasaga Falls where you walk under. A real thrill and gorgeous. To close, if you have not visited this picturesque part of North Carolina, do not let another vacation go by with out doing so. Try to start on the Sky Line drive and then pick up Route #64 at a convenient point and we shall guarantee one of the prettiest trips of your life. Good Luck and don't delay.

#### Victors "Gem Tumbling".

Can you recommend a book that would give adequate information on the procedures for polishing pebbles by tumbling?

Glen R. Miller 607 College Ave. Goshen, Ind.

A good book is "Gem Tumbling & Baroque Jewelry Making" by the Victors. Published by Victor Agate Shop, So. 1709 Cedar, Spokane 41, Wash. (Price \$2.00 postpaid): See Victors' ad in this issue.

# HUGE NATIVE COPPER NUGGET FOUND IN NEW JERSEY AT BOUND BROOK QUARRY

By JOE ROTHSTEIN

255 W. 84 St., New York 24, N. Y.

A copper nugget weighing 106 pounds sits on top of a filing cabinet in the time card office of the Bound Brook Quarry on Chimney Rock Road in Bridgewater Township, New Jersey. Bill Joseph, Assistant to Vice President - Operations, of the Houdaille Construction Materials, Inc., Morristown, New Jersey, who own this huge trap rock operation, mentioned it at one of the meetings of the Lapidary and Gem Society of N. Y., and the first free Saturday thereafter I went to look. The men sitting around the office the day I was there were delightfully vague about it. Where was it found? Somewhere in the north end. Who found it? A guy picked it off the screening table. When was it found? August 1960. This one going to a museum? Nope, we are going to keep it right here. The men generally do not know one mineral from another, but there was no mistaking the considerable pride shown at this find.

The piece is shaped irregularly—slightly longer on top than the bottom but 27 inches long and 17 inches wide describes

it fairly well. Not much of the typical rose sheen of copper is visible and only in the lefthand lower corner is there the characteristic green patina. The rest is the usual brownish metallic color. Rutgers has done an assay and the results were: Copper 99.16, Silver 8.4 ounces to the ton, a trace of Gold, and the balance Iron and Sulphur.

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Just before leaving I said that it sure was a whopper and wasn't it bigger than the one found before (96 lb. nugget found in 1927 now at Rutgers University, New Brunswick, New Jersey). One of the men casually remarked that it was twice the size when it was picked off the screening table. A 212 pound native copper nugget—wouldn't that be something!

Neither the colored slide I have not the photograph I am sending to the Editor of Rocks and Minerals do it justice. Maybe New Jersey isn't Arizona or Michigan but the first copper mine in the Colonies was here and it still is doing fine!



The huge copper nugget found in Bound Brook, N. J., quarry

## COLLECTING FLUORESCENT MINERALS

Conducted by ROBERT W. JONES, JR.

210 S. Rose Circle Dr., Scottsdale, Arizona

Over the years there has been a wealth of material published about the famous zinc mines in the Franklin, N. J. area. Much of this material has been put out by amateurs such as myself and has been. I'm sorry to say, not always completely accurate. On the following pages I'm going to set forth some of the facts concerning the fl. minerals of Franklin which have been shown to be very reliable. The intention here is to provide for the reader a brief, ACCURATE, list of the truly fl. minerals in the hope that more people will turn away from the inaccuracies which exist in the literature and build on this list in the future. Many familiar minerals which have been considered fl. in the past will not be found on this list. The reason is a simple one. They have been shown to be non-fl. or to be so unreliable at best that they can not dassified as fl. and included herein. Consider these deleted minerals as non-fl., or not proven fl.

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A word here about the fl. of the following listed minerals. There is no mineral from Franklin which ALWAYS fl. Even the most abundant willemite and calcite vary in their fl. and much of all the following minerals does not fl. at all. It is difficult to define the fl. color of many of these minerals with absolute accuracy. Because the minerals very in their fl. they will usually vary, to greater or lesser degrees, in their fl. color. This means that the identification of Franklin minerals by the use of ultra-violet light alone is not reliable. It should be said, however, that the ultra-violet light has been a very important aid in the identification of many Franklin minerals. In some cases, it has led to the discovery of new species from this complex ore body. (see powellite).

It is impossible to define exactly the source of ultra-violet light used to ob-

tain the responses given here. So many lights were used by different persons at different times that to report the different types even if known, would be of little value. Suffice to say that the light sources were LW and SW ultra-violet radiation.

ARAGONITE—Definitely a fl. mineral from Franklin, keeping in mind not a single Franklin specie always fl. We find that the aragonite which does fl. is reported as yellow-cream under LW or SW with LW being best.

AXINITE—The fl. of this mineral is red LW or SW with SW being the stronger. A brief phos. red has been reported similiar to that of calcite in time length.

APATITE—That which has been shown to be apatite from Franklin may fl. greenish SW when found in single xls in the limestone. A closely related mineral, svabite, also may fl. but is reported to fl. various shades of orange — SW. Apatite from the ore body has been reported to fl. orange — SW but the apatite-svabite question is far from settled and you should not rely on fl. as a determinant in the case of these minerals.

BARITE—When occurring in the calcite this mineral may fl. pale blue to grayish cream SW if its natural color is pale blue. When found assoc, with franklinite-willemite and being white to colorless it may fl. creamish SW.

CALCITE—This mineral is usually fl. and, along with willemite, has done a great deal to make Franklin fl. minerals famous throughout the land. It is abundant as a gangue mineral here. The red fl. of calcite is related to the manganese content. The calcite from the ore body fl. red LW or SW. Some shows no fl. while other spec. may tend toward a pinkish to violet color. In most cases, the SW light brings out the best response. Also

noted may be a very brief phos. red which has been shown to change color from red toward orange during its brief life.

From the surrounding limestone comes a calcite which may fi. blue SW and phos. blue SW. Blue-green fl. calcite has been reported from the magnetite deposits. It may also phos. the same color.

CALCIOTHOMSONITE—This mineral has been noted to fl. infrequently.

The response is blue-LW.

CALCIUM-LARSENITE—One of the famous "rare" minerals from Franklin, which may fl. bright yellow SW. Under LW it may be noted to fl. a weak yellowish.

CHONDRODITE—This mineral has been found scattered throughout the limestone surrounding the ore body. It is sometimes intimately assoc, with norbergite. Either one or both may fl. yellow SW. In rare cases this mineral may be found as the core of a norbergite grain.

CERUSSITE—A recently reported fl. mineral from Sterling Hill, this fl. a

weak yellow LW.

CLINOHEDRITE—Under SW this mineral may fl. a strong to good orange. An orange phos. has also been noted in a number of spec., too.

CORUNDUM—This mineral shows a deep red fl. under LW light. It has also been observed to fl. a weak, deep red under some SW lights.

DIOPSIDE—This mineral will respond to SW only. When it does, the response is usually a blue-white. It may also be observed to fl. a whitish or bluishcream.

FLUORITE—Xllized fluorite may fl. a strong blue LW, less intense SW. Some of the fluorite has been found to thermoluminesce a fair to strong blue-green. Much of this fluorite is referred to as chlorophane in the literature.

HARDYSTONITE—This mineral may be observed to fl. a violet under SW light. Since some visible violet light is given off by all filtered SW lights it is sometimes difficult to detect the difference between this and a true violet fl. By passing a piece of window glass between the light source and the suspected

violet fl. mineral this difference may be resolved. The glass will absorb most of the ultra-violet and true fl. response will be inhibited. The visible violet will pass through the glass and, if the suspected fl. is caused by this, the color will remain with the glass in place and the species non-fl.

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HYDROZINCITE—Definitely proven to fl. blue SW. From the dumps at Franklin it can be collected coating dolomite and other minerals. From Sterling Hill hydrozincite has been recognized as a better quality mineral than that collected

on the dumps.

MARGAROSANITE—This mineral, when fl., will be a strong pale blue-violet under SW. It is noted to be assoc. with garnet, willemite, franklinite, manganophyllite, pectolite and, uncommonly, with nasonite. Its pearly luster and white color, along with a platy, lamellar appearance showing a rhombic-like cleavage are some of the guides for identifying this mineral.

MICROCLINE—This mineral can be observed at times to show a blue-white, white or cream fl. under SW. Reports indicate that this mineral is rarely fl.

NORBERGITE—As already indicated under the mineral chondrodite, this mineral may sometimes fl. yellow SW. (see

chondrodite)

PECTOLITE—This mineral has been shown to fl. orange to orange-yellow under SW. A brief orange phos. (SW) has been reported and has been suggested as a possible means of recognizing the mineral. The phos. follows a pattern similar to the phos. of calcite.

PHLOGOPITE—One of the micas which has recently been shown to fl. occasionally. The fl. color is a pale or soft

yellow SW.

POWELLITE — A yellow fl. (SW) mineral has been found at Sterling Hill which is very likely powellite. The fl. is unquestionable but the specie has not been absolutely verified as yet. There seems to be little question it is fl. powellite.

SCAPOLITE—When the mine was operating scapolite was removed. Some of this scapolite fl. a faint blue SW. This mineral is by no means common.

SMITHSONITE — Specimens which may be smithsonite sometimes fl. a pale whitish to creamy to yellowish LW. The fl. is there but proving the spec. you have is smithsonite is the collector's problem.

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SPHALERITE—This mineral often fl. a good orange LW and may also show a weak orange response SW. It frequently phos. orange LW and may also show triboluminescence. This means it will give off flashes of light when lightly stroked, crushed or scratched. Another property is sometimes noted. When some sphalerite spec. are gently heated to a point still below incandescence they will be seen to glow softly.

The term cleiophane is applied to the iron free sphalerite found at Franklin. This is still sphalerite, usually formed later in the ore body which is why it has much less iron in it. This iron free sphalerite is more apt to fl. since iron is well recognized as a quencher of fl. The lack of iron in the sphalerite does not indicate a separate variety. It is still sphalerite and should be referred to as such.

Another reported fl. color of sphalerite is blue LW with a blue phos. This is a good example of the varying affects of different activators in the same mineral. This blue fl. is frequently noted as halos around orange fl. of the same material.

SVABITE—This mineral will usually fl. one of several reported colors. Under SW the colors orchid to pink, yellow-ish-orange or pinkish orange may be noted. Svabite is gray to grayish green. One spec. checked was granular and embedded in calcite with garnet and franklinite. The fl. color is a pinkish orange. Another spec., more nearly a green color, fl. a deeper color best described as brownish-orange. This spec, shows a pearly luster, good cleavage and is assoc. with willemite, garnet, fowlerite and a mineral tentatively identified as pyrochroite. (see apatite)

TOURMALINE — The tourmaline which is relatively free of iron, natural color green or violet tan, may fl. a soft yellow SW.

TREMOLITE—This mineral may fl. a weak blue to blue-green under SW.

WILLEMITE—This mineral gives several responses depending on occurrence, impurities, etc. The most familiar is bright green ranging down to weak green SW. Under LW the color may be good to poor green. Much willemite is non-fl. Willemite may also be observed to fl. golden under SW as a result of a difference in activation. This type is best identified by its phos. which is a golden color SW. Among the prized spec. are the radiating fans of xls which phos, for very long periods of time.

WOLLASTONITE—Well established as an orange fl. mineral SW. It may also fl. a weak pinkish color LW. An occasional brief orange phos. has also been reported. Remember, this mineral, as well as all other Franklin fl. minerals, does not

fl. always.

This brings the list of recognized Franklin fl. minerals up to date as of this writing. It is certainly within the realm of possibility that this list will change more or less frequently, especially now that a concerted effort is under way to find some answers to recognized problems.

In gathering this information together there were many dedicated persons who contributed their time and effort in helping me. I am indebted to them all.

One more item of note should be added here. The Franklin-Ogdensburg Mineralogical Society needs your help in finding some of the answers which will help clear up problems still facing Franklin collectors. They need material-your material. Unfortunately, most spec. are destroyed when being studied, but if you have duplicate unidentified fl. minerals, or if you have a large piece from which you can break off enough to be studied, by all means get in touch with John Hendricks, 111 Radcliffe Dr., Weston, Mass. He will instruct you on how to send those needed spec. along to him. As sec'y of the F-O Society, Mr. Hendricks will see to it that your contributed spec, will be put to good use in helping clear up some of the existing mysteries about this greatest of all fl. mineral localities. If you are hesitant about contacting him or want more information, I'll be glad to assist wherever possible.

### MEMORIAL TO CHARLES WILLIAMS HULL

By B. M. SHAUB 159 Elm Street, Northampton, Massachusetts

It has been the writer's pleasure to have attended many meetings of the Connecticut Valley Mineral Club with our very congenial and affable friend, Charlie Hull, who was a charter member of the club.

Charles Williams Hull was born July 14, 1876 at 424 Main Street, Agawam, Massachusetts, and died January 8, 1960 at his home on Meadow Street in the same town. He attended the local schools and Suffield Academy; also Childs Business School in Springfield across the river from his home.

His parents were Charles W. and Julia (Tubbs) Hull. He married Grace Cushman of Agawam. Besides his wife he leaves three daughters, a niece, five grand-children and five great grandchildren.

Mr. Hull entered public office while a young man. He served as an election officer, later as a member of the board of health, as a selectman, water commissioner, and assessor. He was former president and superintendent of the Agawan Cemetery Association, a trustee of the Agawam Center Library Association and a member of the Agawam Congregational Church.

Charlie was born on a farm and was a partner with his father in running a stock farm and milk delivery route. He was a lumberman, bought woodlots and cut the lumber and had it sawed on the lots. In later years he worked in the local factories making boxes and plastic hammers.

Mr. Hull was very much interested in the collecting of Indian artifacts of which the lowlands at the confluence of the Connecticut and Westfield Rivers yielded numerous items in considerable abundance. His collection contains more than 2000 pieces which he collected from the plowed fields in the vicinity. With the shaft of an old umbrella having a hook in the end Charlie examined the area systematically in narrow bands turning over every likely-looking bit of stone. His other hobby, and one which he thoroughly enjoyed, was that of collect-

ing minerals. He started this work when he was a young man and continued to the end. He had a collection of several thousand specimens which is rich in local species from the quarries of the area Among these are the diabase quarries at Westfield, Amherst Notch and Greenfield. The old emery mine at Chester pegmatite dumps at Portland, Connecticut. Russell-Blandford, Goeben-Chesterfield, and many other areas were visited. He also made trips to the pegmatite areas of New Hampshire and Maine. The dumps of the lead mines at Westhampton and Hatfield were favorite collecting places. To name all the localities visited by Mr. Hull would require almost a complete list of the sites which have vielded fair mineral specimens. He always kept a record of the collecting places he visited and sketched the locations of those not well known.

It is not known that Charlie ever sold any minerals, but on visiting a mineral-collecting friend or other collectors. Charlie would take along a box of duplicates as a gift. In return he received specimens from other localities and species he did not have in his collection. He always gave minerals to children for their collections and in the future more than one collector may say he received his first minerals from Charlie Hull.

His interest in agriculture never ceased. He always had a large garden up through the summer of 1959 and he gave the surplus to his neighbors.

To the old timers and many of the more recent members of the Connecticut Valley Mineral Club Charlie Hull will be missed for he attended regularly when he was able and he never missed a field trip if circumstances permitted. It was indeed a pleasure not only for the writer, but for many others to have had Charlie Hull as an acquaintance and friend.

The writer wishes to express his appreciation to Lawrence Schoppee for the loan of a Kodachrome slide made on a field trip from which the accompanying portrait was made.



Charles Williams Hull

## RARE BUTTE COVELLITE STOLEN

THE STATE HISTORICAL SOCIETY OF COLORADO State Museum, Denver 2, Colorado

A rare specimen of Butte Covellite was recently stolen in Denver. It is one of the few not in museums, as only one small pocket of this material was discovered.

The specimen is of hexagonal crystals the size of quarters and ½ inch thick. The crystals lay one in front of another, with nice square edges. The value of this specimen is between two and three hundred dollars and it is, to our knowledge,

irreplaceable.

Although this type of specimen has not been seen by many collectors it should be easily identified. Will anyone seeing this specimen please report it to:

The State Historical Society

of Colorado State Museum Denver 2, Colorado Jan. 10, 1961

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## CURRENT EVENTS

of the
EASTERN FEDERATION OF MINERALOGICAL AND LAPIDARY SOCIETIES

PRESIDENT Roy E. Clark Box 607 Newport News, Va.

EXECUTIVE VICE-PRESIDENT Albert F. Plaag 1241 N.W. 99th Street Miami, Florida

EDITOR
Mrs. Margaret Israel
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TREASURER Dr. George F. Size Box 236 Murphy, N. C.

SECRETARY Mrs. Marguerite Collyer 49 Green Road West Nyack, New York

1961 EASTERN-AMERICAN FEDERATION SHOW

You will be hearing and reading about the combined Eastern and American Federation National Show and Convention, to be held in Miami, Florida, on August 10, 11, 12 and 13, 1961, with the Gemcrafters of Miami, Inc., as the host club. Plans are shaping up nicely, according to releases we have received, and we will leave the main publicity to their able committee, but we thought it advisable to pass on the names of the following committee heads:

General Chairman ...... Albert F. Plaag Treasurer ...... Marguerite Pederson Commercial Space ..... Henry B. Graves Junior Activities ...... Maxine B. Graves

ALABAMA CLUB HAS GEM AND MINERAL SHOW

Twenty-four cases filled with their very best specimens, all specimens identified with uniform labels, and all cases arranged under the supervision of Mr. Robert Howard, Director of the Birmingham Art Museum-there are the features that made an outstanding success of the exhibit of the Alabama Mineral and Lapidary Society, Birmingham, Alabama. The displays, open to the public from December 4, 1960, through the 31st, were designed to acquaint the public with the pleasures and rewards of being a rockhound. Those who viewed the exhibit were lavish in their praise. Credit goes to the entire society, with special mention of the hard-working committee, Rogers, Dunning, Kleine, Dahlen and Sanders, and the Director, Mr. Howard.

NEW COMMITTES FORMED

To assist the host club in forming and carrying out convention plans a Convention Advisory Board was created at the 1960 Federation meeting at Asheville, N.C., and President Roy E. Clark has named as Chairman Mrs. Elsie Kane White (Gem Cutters Guild of Baltimore) Another new committee has the title of Federation Display Case Storage and Transportation. Since the 1961 show will be at Miami, Florida, Henry B. Graves is a "natural" for the chairmanship. Plans to buy a trailer for moving and storing the cases are being considered.

SAFETY COMMITTEE APPOINTED

A newly created Eastern Federation committee is the Safety Committee with Miss Sylvia R. Wadhams of the Litchfield County (Connecticut) Mineral Club serving as Chairman. Here is a matter of importance to all of us, for accidents will happen, whether we are exploring an abandoned mine dump, climbing about in a quarry or just quietly cutting stones at a faceting bench. A brochure is being prepared by Sylvia pointing out the dangers and suggesting means of avoiding them . This should be worth its weight in gold, and the chairman will welcome your assistance, both in enumerating haz-

ards and your tips for overcoming them. The address is:

Miss Sylvia R. Wadhams, Chairman Safety Committee 750 Migeon Avenue Torrington, Connecticut.

ARE YOU IN THE PICTURE?

We'd like to have snapshots of your activities, so how about one of your latest gem show, your field trip to the Got Rocks Mountains, your patio blocks with dinosaur track, or what have you? (No installation of officers, please, for all officers look alike at installation). Please give them to your bulletin editor or secretary with a brief statement and principals identified. She will forward them with the bulletin.

COMMITTEE PREPARING REPORT

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Miss Cynthia Czapek of the Gem and Lapidary Society of Washington, D.C., is the Chairman of the Federations "Education and Program Aids" Committee. Watch for her forthcoming report which will be of great value to each club's program chairman. This comprehensive listing of program material has been in the making for several months and promises to be a real gem. You can be of help in this task by sending in information on the good programs your club has enjoyed, and by sharing the knowledge all the dubs will be enriched. Please give the subject matter, address from which material or more information may be obtained, and if it is a film, the length and cost, if any. Send directly to:

Miss Cynthia Czapek, Chairman Education and Program Aids Committee 5405 Iroquois Road

Washington 16, D.C.

FEDERATION TREASURER ON THE MEND

We are happy to report that Dr. George Size, Treasurer of the Eastern Federation and newly elected president of the Tri-State Rockhounders (Brasstown, N.C.), has been released from the hospital and is recuperating at his home in Murphy, North Carolina. All his friends hope that he will continue to improve and that he will soon be as

sound as the rocks he was hunting when he was stricken.

#### JUNIOR ACTIVITIES

When a list of committee chairmen was published in the September-October issue word had not reached us of Mrs. Maxine B. Graves' acceptance of the Chairmanship of the Junior Activities for the Eastern Federation. With the help of Emily Caligan and Earl Elliott, also members of the Gemcrafters of Miami, this committee is planning to expand the program for young people and to make the Junior Division of the 1961 National Gem and Mineral Show the largest yet.

# CLUBS ELECT OFFICERS

Most clubs start the new year with a new slate of officers. When all the returns are in a complete list will be prepared, but in the meantime we will give you the names of new Presidents and Corresponding Secretaries, with the latter's address, as we receive them.

What goes with our clubs

The Miami Mineral & Gem Society, Miami, Fla., held their Christmas party at their new meeting place in the Simpson Memorial Garden Center. Thirty-two members enjoyed a covered dish supper and exchanged presents afterwards. An interesting feature of their January bulletin is Bob Fidlar's account of his attempt to cut ten matched amethysts to make into a bracelet for his wife, and his success after two years' hard work. Also described is a 3-pound mastodon tooth from Lake Chapala, Mexico, owned by Frank Stoutenburg and a 75-pound crystal of Oklahoma calcite owned by the Williamsons.

(Editor's note: Have those Miamians been bitten by a Texan?)

The Newark Mineralogical Society of Newark, New Jersey, observed their 45th Anniversary at their November meeting, held in the Newark Museum. One of the speakers was Mr. Louis Reamer, a charter member! The December meeting took the form of a Christmas banquet after which officers for the coming year were installed. Clifford Anthes is the new President and the Corresponding Secretary is William F. Clifton, 28 Hawthorne Avenue, East Orange, New Jersey. Seven new members joined at the January meeting, when Dr. Arthur Montgomery of Lafayette College talked on microlite mining in New Mexico.

The Fulton County Mineral Club, Gloversville, New York, in January installed new officers, including Andrew Palmer as President and Vivian Hough, 64 Washington Street, Gloversville, New York, as Secretary. Louis Valachovic reported on a 3-day trip to Connecticut which resulted in 200 pounds of cutting materials. Programs for the coming year will feature displays and talks by members, with Ray Hladik volunteering to take over in February to discuss "Herkimer diamonds".

The North Jersey Mineralogical Society, Paterson, New Jersey, meeting at the Paterson Public Library on January 12th, 1961 heard a talk by Dr. R. A. Laudise of the Bell Telephone Laboratories. His subject was "Hydrothermal Rubies" and members made an excellent display of their own materials, both natural and synthetic corundun, rough and cut. The door prize a "gold nugget" was provided by Mr. John Albanese.

The Miami Mineralogical and Lapidary Guild, Miami, Florida, has enjoyed a number of unusually interesting programs in the past months. Included were a talk on "Hurricanes" by Leonard Pardue of the Weather Bureau; one by Dr. Cesare Emiliani of the Marine Laboratory of the University of Miami on "Marine Geology" and a third by Captain E. John Long, also of the Marine Laboratory, on "Oceanography". On December 1, 1960, the group had the priviledge of attending a meeting of petroleum geologists and hearing a talk by Bud Ackerman and of examining a number of well cores. A week later they learned about geologic maps from Tom Spence to end a series related to the ocean and its effects on our lives. The Christmas party on December

19th ended a most successful year, with plans already complete for the second Annual Rock-oree to be held on March 18th and 19th, 1961. This was held at the Museum of Science and Natural History and was attended by rockhounds from the entire state.

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The Monmouth Mineral and Gem Club, Fair Haven, New Jersey, installed new officers at their December meeting, including as President William Meisenbacher and as Secretary Mrs. Naomi McGregor of Horseneck Point, Oceanport, N.J. Their latest bulletin contains a glowing report by George Dunn of a week long field trip made by himself and eight others to New Hampshire.

The Pine Tree Gem and Mineral Association of Roxbury, Maine, installed new officers at their January meeting. Their new President is Mrs. Laura Du Bois and the Corresponding Secretary is Mrs. Evelyn O. Taylor, Frye, Maine.

The Queens Mineral Society, Inc., Richmond Hill, New York, now meets on the third Monday of the month, at their new meeting place, 85-01 118th Street, Richmond Hill. Their January meeting featured a talk and the showing of a film on "The Story of Copper". Officers for the new year were installed, including Theodore Fredericks as President and as Secretary, Louis H. Roth, 114-67 223rd Street, Cambria Heights 11, New York.

Gemerafters of Miami, Inc. Miami, Florida, had a most commendable project for December, that of providing cutting material for patients at the South Florida State Hospital. Gem cutting has been part of the therapy at the hospital for more than a year and when the program was threatened by lack of material the Gemcrafters took over the task of providing a new supply. A talk on 'Crystals", with models used to illustrate the different types, was made by Dr. Virgil G. Sleight of the Geology department of the University of Miami. Another program recently enjoyed was Walter Blackwell's color slides of exhibits in a number of museums.

The Mineralogical and Lapidary Society of Pittsburgh, Pittsburgh, Pennsylvania, had a Christmas party for their December meeting with an exchange of gifts. The party was a huge success as was their show held at the Buhl Planetarium. There, in addition to the excellent displays made by members of the club, were added attractions in the exhibits of statuary by Henry Bursztynowicz, Pittsburgh sculptor, and floral arrangements from the Phipps Conservatory. The January program included a talk by Mr. Paul Popovich illustrated by his own color slides of mineral collecting in many parts of the country. Also shown were slides made of the club's recent show.

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The Alabama Mineral and Lapidary Society, Birmingham, Alabama, held its annual banquet in November and in December elected new officers, including E. O. Dahlen as President and I. M. Davis as Corresponding Secretary. The club's exhibit at the Birmingham Art Museum (reported elsewhere) occupied most of the members, but five of them managed to meet with Hal Kleine to organize a lapidary unit. A field trip was made on January 21, 1961, to Rockford, Alabama. And speaking of trips, one of their members went from Birmingham to Canada last summer on "\$20.00 and a Scooter"! The January meeting featured a talk by Dr. Wiley S. Rogers on the "Geology of Alabama".

The Mineralogical Society of Pennsylvania, Doylestown, Pa., on November 13, 1960, heard a most interesting talk by Dr. Arthur Socolow, Economic Geologist of the Pennsylvania Geologic Survey. The first part was an explanation of the work done by the Survey to develop the geological resources of the state, the second part an account of his experiences as a geologist in Alaska. Princeton University, Princeton, New Jersey, was the site of a field-trip-with-a-difference in December when members of the University geology department showed a film, then demonstrated the latest equipment used in the study of earth sciences. The dub's January meeting was held at the Reading Public Museum and Art Gallery in Reading, Pa., when a film on "Crystals" was shown and members arranged an exhibit of their own crystal specimens.

The Georgia Mineral Society, Atlanta, Georgia, had a "brag and swap" night in December, 1960. The field trip for that month was made to Yatesville, Georgia, where beryl, apatite, muscovite with biotite crystals, and kyanite were collected. At the January, 1961, meeting Dr. H. W. Straley of Georgia Tech gave a talk on his recent trip to Europe. A trip to Ringgold, Georgia, produced banded agate and red jasper. The Gem Club section of the Society held a separate meeting on January 16th at which time Earnie Andrews led a discussion about birthstones. The lapidary group started a new class at the Art Studio of the Druid Hills High School.

The Rockland County Mineral and Gem Society, Spring Valley, New York, installed new officers at their dinner meeting on December 17, 1960. The new President is Charles T. Fray and the Secretary is Miss Lillian Stuckey, 298 Highland Avenue, Nyack, N.Y.

The Gemcutters Guild of Baltimore, Inc., Baltimore, Maryland, had as their December, 1960, speaker, Mr. Albert Blum of Baltimore, who spoke on his recent "Trip to Alaska" and showed color slides. Plans are being made for a Gem Show to be held at the Edmondson Village Hall on May 27th, 1961. Henry Clodi and Don Porter are in charge, and it is their goal to have at least one exhibit from each member.

The Lapidary and Gem Society of New York, New York City, had slim pickin's on their October field trip to Summit, New Jersey, but they did have the priviledge of seeing and photographing a recently discovered copper boulder, and gaining inspiration for a future try. In November Will Shulman showed pictures of his mineral collection and told how he and his wife built their home as a display place for the minerals—a case of rocks in the house, if not in the head!

The Geological Section of the Buffalo Society of Natural Science, Inc., Buffalo, New York, heard Dr. Russell T. Boyd of Toronto, Canada, in December, and saw his movies on a "Safari to the Annadamooka Opal Field in Australia". Trips to Australia are becoming more popular, and no wonder-traveling by air with layovers in Hawaii and the Fiji Islands, then a bus trip to the opal country in the interior of the down-under continent. The January meeting combined mineralogy and photography when Dr. Henry Stadlinger spoke on "Showy Minerals" and displayed pictures taken of them with an ordinary camera. Elmer Zimmerman, display Chairman, is urging members to bring something to exhibit at each meeting. February was the annual Swap and Trade night.

The Norfolk Gem and Mineral Association, Norfolk, Virginia, re-elected H. P. Gavan as President for 1961 and chose as Secretary Mrs. Aileen S. Morris, 1355 S. Braden Crescent, Norfolk 2, Virginia.

The Western South Carolina Gem and Mineral Society, Greenville, South Carolina, held a Christmas party on December 12, 1960, and installed new officers for 1961. These include the President, Chuck Wuest and the Secretary, Mrs. L. H. Gambrell. "Thunder Eggs" was the subject of the talk given at the January 9, 1961, meeting by Mr. J. M. Dean, Principal of Paris School. Mr. Dean arranged an exhibit of some of his specimens from the Priday Ranch and Pony Butte beds in Oregon, and even furnished the door prize.

The Gem and Mineral Society of the Virginia Peninsula, Hampton, Virginia, installed officers for 1961 at their January dinner meeting. W. H. Matthews is the new President and Mrs. H. E. Novinger, 21 Francis St., Newport News, Virginia, is Corresponding Secretary. Speaker for the event was Dr. Albert Forslev, head of the Geology Department of the Norfolk Division of Virginia Polytechnic Institute. Dr. Forslev substituted for Captain John Sinkankas, USN, whose

duties called him away. Subject of the talk was "What We Don't Know About The Earth" and dealt with some of the studies now in progress. Roy E. (Chippy) Clark, Jr., received the Francis Murray Achievement Award, a prize given to the Junior member with the best over-all record in school and community activities. Junior officers installed at the same meeting included Eugene Groshong, President, and Beverly Anderson, 127 O'Canoe Place, Hampton, Virginia, Secretary.

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The Richmond Gem and Mineral Society, Richmond, Virginia, recently moved into their own building at 409 North 9th Street, Richmond, just across from John Marshall High School where they started their club a few years ago. The new building gives them a large meeting room, a display room for permanent exhibits and a library and kitchen. The improved facilities have produced a wave of enthusiasm resulting in constantly increasing membership. To celebrate, a covered dish supper was held on February 8, 1961. Among the guests was Roy E. Clark, President of the Eastern Federation, who spoke briefly on the organization of the Federation and its value to the individual club and outlined current activities. Also present was Margaret Israel, Editor of "Current Events" to report first-hand that a good time was had by all. -0-

KEEP 'EM COMING!

We heard from a couple of new clubs this month, missed hearing from some old friends, but we want to thank all those who contributed and apologize to those whose bulletins are sure to arrive the minute this issue of "Current Events" goes into the mail box, and so must be held over until the next issue. It is a pleasure to read your news and we are anxious to hear from all the silent ones, who, we suspect, are having more fun than anybody. Please send your news to Margaret Israel, 136 Hampton Roads Avenue, Hampton, Virginia.

### **DES MOINES**

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# Club and Society Notes

#### THE ROLLIN' ROCK CLUB MINERAL SHOW For the Eastern Seaboard

On June 24 and 25, 1961, Rollin' Rock Club members from the eastern states, and points west, will gather at ONYX Cave, Berks County, Pennsylvania for the first RRC show ever to be held in this section of the country and also the first RRC show to be held in a cave. This "conclave at a cave" will be strictly swapping for fun' show as NO DEALERS will be allowed.

The show officially opens at 10 A.M. Saturday, June 24, A fee of \$1.25 will be collected from each adult attending. Children will be admitted free. The fee includes registration, parking, camping or picnicking facilities, and

admission to the cave.

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Swap tables will be available at 50 cents per day. Also on the program is a guest speaker each day at 1 P.M. and an interesting field trip to the anthracite coal fields at 2 P.M. both days. On Saturday evening a campfire program will round out the activities. An experienced recreation director will provide a sports program for the children at no extra cost.

All types of accommodations are located in

the vicinity and the hardier folks may camp on the premises. Light refreshments may be purchased on the grounds and fine eating establishments are plentiful on the adjacent highways. Churches of all faiths are also nearby.

Onyx Cave is located in the heart of the Pennsylvania Dutch country and many interesting side trips may be made from this location. The cave may be reached by U. S. Rt. 22, U. S. 122, U. S. 222 and Pa. Turnpike. Signs will be posted along the road and RRC markers will be seen at strategic points. The nearest town is Hamburg, Pa.

Onyx Cave is one of the longest caverns in the State of Pennsylvania, nearly 922 feet in length. There are many beautiful stalagmite and stalactite formations which may be seen from graveled walks. The cave is lighted throughout and will be of interest to all.

All rockhounds and their friends are invited to attend and further information may be obtained by writing to Mrs. H. Norman Michel, 579 Chestnut Street, Kearny, New Jer-

R.R.C.O.T.A.A.O.S.O.C.O.T.W.

NATRONA COUNTY ROCKHOUND CLUB

Plans for the Rocky Mountain Federation Show, to be held in Casper, Wyo., on June 9th, 10th and 11th, 1961 are going forward at a rapid pace. Casper, being the "Convention City", has plenty of accommodations for all. Send inquiries to Bill Guthrie, 318 So.

Fenway, Casper, Wyo. For those who prefer staying in hotels or motels Casper has the best in accommodations. For those who want to camp out there will be ample space at the Fair Grounds. The Industrial Building, in which the show will be held, has showers and other facilities including meals and short orders for those who wish to eat there. Also parking space for over

On the evening of June 8th, the day preceeding the opening of the show, our mem-bers will furnish a potluck "Get Acquainted" dinner at the Industrial Building. All exhibitors and dealers, also their families, are most

cordially invited to attend.

Several very good field trips are planned, our Field and Camping Chairman is busy too. Wyoming is rich in rocks of gem quality, fossils and minerals. These trips will be free of charge except for meals so, pack a lunch and come along.

We will have several working units at the show in case anyone wishes to further his experience in lapidary work. We ask all exhibitors to contact our Committee at an early date making known the requirements as to lighting needed so that proper arrangements can be made. We all want this to be a topnotch show.

ALL ROADS LEAD TO CASPER IN 1961 Florence Johnson, Secretary 1765 W. 15th St.

Casper, Wyo.

#### THE OKLAHOMA MINERAL AND **GEM SOCIETY**

The January program of the O.M.G.S. was a very informative talk entitled, "Points to Look For in Judging Competitive Exhibits", given by Norman G. Flaigg. The talk was illustrated with interesting drawings on a flip chart showing what the judges look for in lapidary, faceting, silver work, and specimens that are entered in competition.

Two competitive cases were displayed; a prize-winning blue ribbon case by Marion and Domer Howard, and a hodge-podge case by Vona Burns. At the end of the program a contest was held and prizes awarded to the members who had absorbed the most facts that had been presented.

The Oklahoma Mineral & Gem Society

Publicity chairman: Maxine Stoner 2725 Warwick Drive Oklahoma City 16, Okla.

ATTENTION—New clubs in the Midwest!

The Midwest Federation of Mineralogical Societies have a kit full of information on organizing, by-laws, programs, etc. that they will send to any new group in the Midwest that needs it. Often Federation officers are able to give personal assistance to new groups but at any rate the kit is still of value and every club should have one. The kit is available, free of charge, from the Chairman of the Midwest Federation Membership Committee, Richard N. Lake, P. O. Box 361, Chisholm, Minn.

#### CAPITAL MINERAL CLUB

On Jan. 14, 1961, the initial meeting of the Capital Mineral Club was held with 41 in-terested persons in attendance. The Club will meet the 2nd Saturday at 7:00 p.m. at the Ward Hall on West Street, Concord, N. H.

Collectors in the area desiring further information may contact Mr. Sam Stevenson, 2½ Main Street, Concord, N. H.

For the Committee Lawrence C. Rising, East Andover, N.H.

#### LITCHFIELD COUNTY MINERAL CLUB

The new officers of the Club for 1961 are: Jason C. Clark, President

West Cornwall, Conn. William Domonell, Vice-President 28 Brooker St., Torrington, Conn. Miss Sylvia E. Wadhams, Recording Sec-

750 Migeon Ave., Torrington, Conn. Mrs. Alfred L. Lawson, Corres. Secretary 540 S. Main St., Torrington, Conn.

#### NORTH SHORE ROCK & MINERAL CLUB

The North Shore Rock & Mineral Club is one of the most active clubs in the East. It has a membership of 130. During 1960 the members have visited all the New England states, California, New Mexico, Arizona, Utah, Washington, Canada and Mexico. For the New England trips, our President, Jim An-derson of Manchester, Mass., has been an excellent scout, finding the impossible places. Some of our members have acquired as many as 150 new specimens this year alone.

At our last meeting, Mrs. Lena Waite of Lynn, Mass., showed slides of her recent trip to Utah and Arizona: also displayed her excellent agate specimens. At this same meeting a testimonial was given to our President, Jim Anderson, in token of the many fine things he has done to keep the activities of our club in A-1 condition. A fine lightweight ice chest was given him for his future trips. "Happy Hunting, Jim."

Margaret M. Barry 79 Hale St. Beverly, Mass.

#### DUGWAY GEM AND MINERAL SOCIETY

#### Dugway, Utah

Enclosed is an item on "rock strata map-ping" which was conducted by the University of Utah at Dugway Proving Ground, Dugway, Utah, during the month of January.

Dr. L. Stokes and Dr. N. Erickson of the University of Utah and Lt. John W. Barry, president of the Dugway Gem and Mineral Society, with Mr. Milton Johnson; completed

a Rock Strata Mapping of Dugway Proving Ground, which is located approximately 83 miles southwest of Salt Lake City, during the month of January.

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The purpose of this survey was to complete the "rock strata mapping" of the state of Utah. Dugway, until now represented the only area in the state that had not been mapped. When all the material is assembled and analyzed the Utah Geological and Mineralogical Survey will publish a bulletin and typographical map of their findings.

The area covered by the survey consisted of everything from the salt flats to the mountains over a 210 mile perimeter.

The unofficial report indicates various lava flows in the vicinity of Little Davis Mountain southern part of the Cedar Mountains and Sapphire Mountain. Granite Mountain which is the dominant land mark at Dugway is reported as being of pre-cambrian origin or more than 500 million years old. Sedimen-tary rock of various ages was found through out the proving ground.

Fossil indications show brachiopods, crinoids, horn coral, colonial coral, trilobites and many others. The minerals which were found in abundance were double terminated quartz, amethystine quartz, calcite crystals, pyrope gar-nets, fluorite, mica, limonite, hematite, feld-spar crystals, and other minerals of igneous origin.

The survey which is scientifically known as Stratigraphic Indexing, was made possible by the assistance of Lt. Barry and Mr. Johnson who acted as guides from both the proving ground and the Dugway Gem and Mineral Society.

> Steve J. Cingel Publicity Chairman Dugway Gem and Mineral Society 53 E. 2nd St. Dugway, Utah

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# **Rocks and Minerals Association**

(INTERNATIONAL)

### **NOTES AND NEWS**

DON PRESHER, PRES. BOX 146, MONTROSE, N. Y.



I have had so many requests for information concerning the Rocks and Mineral Association that I think some facts about our association would be in order at this time. The R&MA was formed in 1928, its main purpose was the increase and dissemination of mineralogic knowledge. In 1928 there were only four mineral clubs in the U.S.A. The New York Mineralogical Society of New York City (the oldest), The Philadelphia Mineralogical Society of Philadelphia, Pa. (2nd), The Newark Mineralogical Society of Newark, N. J., and the Maine Mineralogical and Geological Society of Portland, Maine.

To carry on its purpose the association conducted and sponsored field trips all over the country. A day would be selected generally in the summer months and key members would be appointed Field Trip chairmen for their areas. The big event given much publicity in R&M, (in many instances in the local paper in which each field trip chairman resided.), and the trips would go off with a BANG. As many as 300 to 400 participated in the outings.

In June 1930, ROCKS AND MINERALS issued a special Maine number as a tribute to the newly formed Maine Mineralogical and Geological Society. This issue was a great success and thousands of copies were sold out west. The interest created caused mineral clubs to spring up in California, in Oregon, and then the fever began to spread eastward through the middle west until now almost every state in the union and in many foreign countries boast at least one club. As many R&MA members were key personal and character members of these new clubs, their available time was taken up with these groups and thus their interest transferred from the R&MA, to the clubs. This caused a lessoning of the activity of the R&MA. As local clubs grew and prospered, the need for the R&MA to sponsor field trips and assist in the formation of mineral clubs declined.

Many illustrious and well known figures in the mineralogical field have been and still are members of the R&MA and it is a privilege to be associated with these people and to add our contribution in any way possible, to further and encourage the studies and pleasures of the science of mineralogy. Although the formation of many mineral clubs has eliminated the need of field trips sponsored by the association, there still exists the most important job, that is, the increase and dissemination of mineral knowledge. More than ever the need to help youngsters divert their time and energy to a healthy and educational channel is still with us. It would be an odd parent indeed, who would discourage a child's interest and activity in the pursuit of mineral knowledge, especially in these days with so many other diversions and outlets that are harmful to youngsters.

Our government is taking a much greater interest in the field of mineralogy than ever before. The need for new minerals and their usage is of prime importance in our fast moving world of today. Earth science is now taught in our grade and high schools. All this points up to the need for more progress in the study of mineralogy and the need for more participation in this field. We, as individuals, interested in the field as a hobby and as a retreat from our every day stress and strain can help a great deal in promoting the needed advancement in mineral science and in molding the character and destiny of our young generation. How? By doing every thing possible to encourage the youngsters that show a spark of interest. Encouragement and help at the opportune time could be the added ingredient needed to produce a future scientist, who knows?

We can offer our assistance to the science teachers in our local schools, display our collection to interested parties, donate extra specimens to schools for study and by any other means of encouraging interest that may present itself

Now, as to how we can help ourselves. Members of the R&MA are a responsible group of people and are expected to respect the rights and property of others. By doing just this and at the same time let it be known that you are a member of the R&MA, together we can build a

reputation for integrity and responsibility that will give access to many collecting areas that otherwise would be closed. Mention your membership, display your emblems and let everyone know you belong to the R&MA. This will add to our prestige and will do more to insure consideration when we need it.

Once again I would like to ask, what would you like to see in this column? It is yours, you know, and any suggestion and help to the association will be ap-

preciated.

If you would like to have information on trips or locations to mineral collecting, or whatever, send in these items and we will do our best to publish them.

> Happy Hunting Don Presher See Page 195

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#### THE 2nd HEART OF CONNECTICUT GEM AND MINERAL SHOW Sponsored by the NEW HAVEN MINERAL CLUB

Plans for the 2nd Heart of Connecticut Gem and Mineral Show are now well under

The show this year is being sponsored by the New Haven Mineral Club of New Haven, Connecticut on Saturday and Sunday, July 15th and 16th, 1961. It will be held at the American Legion Building in Moodus, Connecticut, off Route 151— where it enjoyed so much

success last year.

Many new features are being included in this year's enterprise. The pushbutton display map of local collecting areas will occupy its old place at one end of the hall and a new map of the entire state is now under construction to occupy another part of the hall. The new map will be used to point out all major collecting areas in the State of Connecticut.

New display cases are being constructed for the many club and private exhibits. Club exhibits will be on a competitive basis with awards being given on the basis of material display and organization. Clubs wishing a case reserved for their exhibit please contact either member of the Show Committee listed below, as soon as possible. Details will be forwarded by restrict mail.

forwarded by return mail.

Mr. David M. Seaman, Scientific Assistant in the Mineralogy Department of the American Museum of Natural History in New York City, will again exhibit nore of his superb material. Many collectors are becoming concerned over the increasing number of localities being closed and of the so-called scarcity of new materials available to the collector.

However, to prove that there is really no scarcity of good mineral specimens for the collector who is willing to work for his material, there will be at least one case of private prospect material on display.

These specimens were found by amateur collectors who were willing to expend the time and effort needed to unearth them, not in old abandoned quarries, but by seeking out their own locations.

This display will also serve to show what the State of Connecticut or any other state is capable of producing — mineral wise — to those curious enough to look for it. Many of the dealers who were on hand last year have expressed the desire to return and will be with us along with a few new ones to offer some of the best material available.

Locations for field trips are now being considered and anyone having a preference as to locality, please let the committee know. If there are enough inquiries for the same locality, a field trip might be arranged. Please let us know before the first of April.

A snack bar will again be maintained on the premises and those who came last year will recall that there was a large convenient parking area for over a thousand cars.

Those who wish a listing of the camping facilities or for accommodations in the area, please write the committee and a list will be sent.

Please address all inquiries regarding the show to either of the following:

Mrs. Helen M. Gallant, Box 32, Moodus, Connecticut.

Mr. Lewis K. Moore, 19 Stony Point Road, Clinton, Connecticut.

#### EXPERIMENTING WITH MINERALS

By RICHARD A. HANSEN 3514 N. Russett St., Portland 17, Ore.

From the time I was a small child I mllected rocks from rivers and mountains wherever we happened to be. Of course they were the usual type picked up by small boys. By the time I was eleven years old my ideas had developed to a point where I realized it was necessary to concentrate on certain phases of rock collecting. At this time I joined the Oregon Agate and Mineral Society where one had the chance of seeing beautiful specimens of all types such as agate, jaspers, crystals, fossils, etc., twice a month. Very soon I became interested in the chemical composition of minerals and developed a curiosity for identifying them myself rather than relying upon the word of someone else.

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Now after having been a rockhound for four years I've noticed that most people are interested mainly in agate and jewelry making, but to me the study of minerals and crystals is far more exciting. Here is a wide field open to the collector and to the individual who wants to probe further into the composition and structure of minerals rather than just enjoying their beauty.

An interesting branch of this study is testing the minerals for their composition. Without a complicated laboratory many tests can be performed right in the home with such simple equipment as a Bunsen burner, platinum wire, test tubes, blow pipe, charcoal blocks, acids, including hydrochloric acid (HCL), nitric acid (HNO<sub>3</sub>), sulphuric acid (H<sub>2</sub>SO<sub>4</sub>) etc. and certain dry reagents. With these materials one can perform almost magical tricks like the magician of old.

There are several different types of tests which one can do for the identification of minerals. They are, the open and closed tube test, hardness, streak, fusibility, flame, bead, fluorescent and phosphorescent and cleavage tests.

One of the more spectacular closed tube test is the one for nickel. This is performed by taking a small piece of nickel ore, putting it in the test tube and dissolving it in nitric acid, completely neutralizing it with ammonia and adding a little dimethylglyoxime solution. Boiling this over the Bunsen burner makes a bright pink colored solution.

Another closed tube test just as interesting is the one for lead minerals. This is done by dissolving the lead mineral in a weak nitric acid solution. After it is dissolved I have found it best to pour off the solution into another test tube leaving the remains of the mineral behind. Now, by adding a grain of potassium iodide to the solution a sparkling yellow precipitate will be formed. The reason for pouring off the solution is because I have found that if this is not done the yellow precipitate will turn a dark muddy color.

In the fusibility test one also uses acids to a certain extent, for example, the test for chalcopyrite. In this, as in all tests for fusibility, you need a Bunsen burner or alcohol flame, blow pipe and charcoal block. First you make a small split-pea sized depression in the charcoal block and place several small grains of the mineral to be tested in the depression. Now place the block so it is about even with the top of the burner or alcohol lamp. Next take the blow pipe placing one end in the reducing flame and the other in your mouth. The technique of using a blow pipe is something that requires a little practice before one is able to use it with any degree of skill, as it is necessary in the testing of some minerals to keep a steady stream of air without interruption for several minutes as one has to exhale at the same time he is inhaling. By keeping a steady stream of air flowing through the blow pipe a jet of flame will be formed. Adjusting the charcoal block so that the chalcopyrite is directly in the flame you can melt all the fine bits of mineral into one magnetic globual, due to the extreme high temperature. Now, by touching this globule with hydrochloric acid (HCL), it will tint the flame with a blue flash. By placing the globule in strong nitric acid the solution will be turned green and by adding ammonia to this nitric acid solution it will cause the red iron hydroxide to precipitate and leave the solution blue. Other minerals which I have used in the fusibility test are covellite, pyrite, azurite etc. For complete identification the fusibility test is only a preliminary step but with the aid of certain acids you can get a definite identification such as in the test for chalcopyrite.

The bead tests are performed with the aid of a platinum wire, borax, salt of phosphorus, sodium fluoride or lithium fluoride. Some minerals which can be used in this test are: copper, cobalt, iron, nickel, uranium and tungsten to name a few. In any bead test it is necessary to heat the mineral first to eliminate any trace of arsenic that might be present. This is necessary, though platinum can withstand great temperatures and most acids, arsenic will make it brittle. After heating the mineral it must be completely pulverized to a fine powder. Now, make a loop in one end of the platinum wire about an eighth of an inch in diameter and heat it until red hot. By quickly dipping the red hot wire into the borax. or any of the other reagents previously mentioned and reentering it into the

flame allowing it to reduce itself, a small clear bead is formed. After the bead becomes extremely hot it is then dipped into the pulverized mineral and again reentered in the oxidizing flame where should be left until the mineral to be tested is thoroughly mixed throughout the bead. While still hot a quick flip of the wrist will release the bead from the platinum wire. When cooled you can see a definite color such as yellow, green blue, violet or orange depending upon the elements in the mineral. This test when done properly is quite easy.

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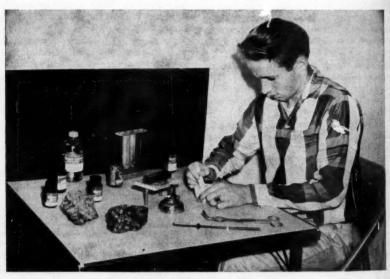
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The Fluorescence and Phosphorescence tests are performed with the aid of a long or short ultra-violet light. In some cases this can be very spectacular as many brilliant and different colors may occur from just an ordinary looking rock. Phosphorescence is the glowing of the mineral after the light has been turned off.

Whether you are a pebble-pup or a full fledged rockhound, if you will take an interest in this most fascinating phase of mineralogy you will not only become acquainted with different chemicals and how to use them but you can gain a better knowledge of the various min-

(Continued on page 174)



Richard Hansen at work in his laboratory.

# **Publications Recently Received**

#### TAYLOR-X-Ray Metallography.

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By Dr. A. Taylor, Advisory Physicist, Westinghouse Research Laboratories, 993 pp., illus., with many drawings and figures. Published by John Wiley & Sons. Inc., 440 Fourth Ave., New York 16. N.Y. Price \$27.00

This is both .... a theoretical and a practical book. Its main theme is the application of X-ray techniques to the study of metals and their alloys. It also includes references to analogous neutron and electron diffraction procedures. Along with basic theory, a detailed description is given of the apparatus and experimental procedures required in the solution of real problems. Among the many subjects discussed in detail are the production of X-rays, X-ray absorption, and both X-ray and neutron radiography. To make the book useful to the practical X-ray worker, the appendix includes many useful tables, and the opious references after each chapter makes it a useful guide to the literature.

The object of this book is to give the metallurgist an appreciation of X-ray methods as they apply to his particular field of work, and to present the X-ray crystallographer, untained in the metallurgical arts, with a suitable introductory text.

A. Taylor received his Ph.D. degree in 1936 from Manchester University, England. Emigating to the United States in 1952, his first position in this country was as a physicist with Horizons Inc., Cleveland, Ohio. Since 1954 he has been Advisory Physicist for Westinghouse Research Laboratories, Pittsburgh, Penna.

# TERZAGH!—From Theory to Practice in Soil Mechanics.

Selections from the writings of Karl Terzaghi, 425 pp., illus. with photos and drawings. Published by John Wiley & Sons, Inc., 440 Fouth Ave., New York 16, N. Y. Price \$12.00

In the last century, no civil engineer has exerted so much influence on his profession as Karl Terzaghi, who established and developed a new branch of engineering science.

For the first time in one volume, an account is given of this man's life and his method of working. The representative selection of papers (which are in English, for the most part) includes those that established the science of soil mechanics, a selection of his professional reports that indicate his methods of dealing with specific jobs, and a complete bibliography of his works.

The collection contains papers that were previously hard to find in the literature, and others that have been translated for this book. They provide a special insight into how Terzaghi approached and solved foundation, landslide, tunneling, and earth-dam problems.

## LIVINGSTON—Introduction to Geology (an outline)

By Alfred Livingston, Jr., Earth Science Department, Los Angeles City College, 55 pp., illus. with drawings, figures and photo. Published by National Press, 850 Hansen Way, Palo Alto, Calif. . . . . . Price \$3.00

This outline was prepared to fulfill a need which, to the author's mind, has not been met by any textbook on the market at present; that is, to present to the student the fundamental principles of the most important concepts in geology and to provide him with a vocabulary which makes it possible for him to delve further into the subject should his interest be aroused. A third point might be mentioned, and that is that the student keep his outline before him during the lecture hour so that little or no note taking is necessary and his attention is hence held to the subject at hand and is not dissipated in trying to outline the lecturer's statements.

# MATTHEWS—Texas Fossils (an Amateur Collector's Handbook).

By William H. Matthews II, Associate Professor of Geology, Lamar State College of Technology, Beaumont, Texas, 123 pps., 26 figs., 49 plates. Published by the Bureau of Economic Geology, University of Texas, Austin 12, Texas ............................ No price quoted

This publication is primarily an amateur collector's handbook and as such offers many suggestions and aids to those who would pursue the hobby of fossil collecting. It tells, for example, what fossils are, where and how to collect them, and how they are used. Suggestions are made as to how the specimens may be identified and catalogued, and there are discussions and illustrations of the main types of plant and animal fossils. Included also is a simplified geologic map of Texas and a brief review of the geology of the State.

#### DEALERS CATALOGS

Scott Williams Mineral Company, Inc., 440 N. Scottsdale Road, Scottsdale, Ariz., have recently issued a 10-page Bulletin featuring many recently acquired choice minerals from Mexico, Alaska, Italy, South Africa, Spain, Norway, India, Madagascar, Canada, England, Germany, Greenland, Brazil and from all over the U. S. Rush for a copy of the Bulletin (it's free) and then double rush your order before the choice specimens are sold out.

(Continued on page 174)

#### **NEW GEM SCOOP**

Is An Extend Arm and Third Leg

This amazing New Tool, The "Gem Scoop", has been announced by Estwing Mfg. Co. of Rockford, Illinois, makers of World Famous Rock Picks and Sportsman's Axes.

It is of strong aluminum alloy, 36" long, is sturdy, and yet very light. It gets gems under logs, brush, rocks, or out of water. It rakes, picks-up, and is a non-slip cane that saves your back. It is the best rock climber, both up and down. The non-slip grip is of Nylon-Vinyl, molded on permanently; it can't loosen, come off, or wear out.

All Geologists and Gem Hunters who have seen this New Tool want it, which makes it an ideal gift for the whole family. The "Gem Scoop" lists at \$7.50.

#### THE ESTWING GEM SCOOP

- How it originated -

E litor R&M:

On my rock trips last year a rockhound lady friend in Phoenix, Ariz, suggested a tool for chasing snakes and retrieving rocks from under Cholia bushes and similar inaccessible spots. On Lake Superior, another friend suggested a scoop for getting specimens out of water. One in Idaho suggested a climber's tool. Several suggested non-slip canes.

Last winter, I worked all these suggestions into one Gem Scoop, of which I am sending you one as ny compliment. If you wonder why the noles are in the bottom, they are for undersized diamonds to drop through, also the water.

After you have examined and tried this Gem Scoop, I would appreciate greatly if you will let me know all your impressions of it, whether good or bad. This will let me know of any improvements wanted, or possible thoughts for additional tools.

Ernest Estwing Estwing Mfg. Co. Rockford, Ill. besic

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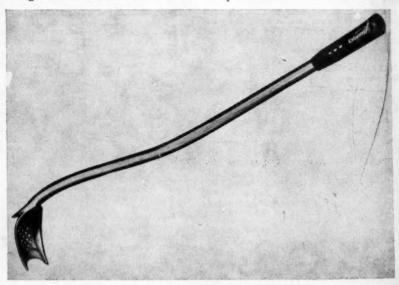
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P.S.—You may be interested to know that I started rockhounding a year ago last February, made 4 collecting trips in 1959 and 2 this year, and have filled 3 special cabinets and ordered a 4th,

Nov. 7, 1960



New Gem Scoop

besides the fluorescent and transparent abinets. I have previously tried all sorts of sports and pastimes, but this has them all beat, both for getting outdoors for collecting, and winter fun in finishing the specimens.

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Editor's Note: The Gem Scoop is a beauty and should prove a most welcome addition to a mineral collectors field trip equipment. Every collector should have one. It werts only \$7.50.

Alas, however, we have not yet used

our treasured gift in the field for ever since the Gem Scoop arrived we have had nothing but cold winter with snow. lots of snow and more snow. It will take many days for the snow to disappear (probably some time in May) and then we can try out the Gem Scoop, outdoors. But the Gem Scoop has been put to the test with flying results-retrieving rocks that have rolled into those dark corners. between boxes, crates and other awkward places. Why the rocks stuck to the scoop like flies to a flypaper!

## VISITING ROCKHOUNDS WELCOME

(Continued from page 116)

John Burmeister. Preston. Iowa.

Maj. Raymond Prueitt, on U. S. 42 at Sligo, Ky.

(mail-Sulphur, Ky.). Larry Davis, 617 East Ave. B, Hutchinson, Kans

Jim Miller, 330 N. Cedar, Medicine Lodge, Kans. Homer & Alice Horn, 815

Miami St., Hiawatha, Kans. Edward R. Loveland, Delsea Drive, Pitman, N. J.

Mr. & Mrs. Rudolph Arp, 99 Mountainside Terr., Clifton,

Michael F. Kidzus, 23 Ravine Drive, Matawan, N.I. Vernon Haskins, Curator, Durham Center Museum, East Durham, N.Y.

Mrs. J. Carl Rinehart. Pennsboro, W. Va.

G. W. Weber, 1320 Portland Ave., Walla Walla, Wash. Thomas L. Sellers, Box 186, Margarita, Canal Zone

Mr. & Mrs. W. F. Erichsen, 2075 Lansdowne Rd., Victoria, B.C., Canada.

Lyle De Rusha, RR 1 Chippewa Falls, Wisc.

Douglas Scott. Markham. Ont., Canada.

Ret R. Latta, 1009 Oakmont, RR 7, Rockford, Ill.

John O'Callaghan (age 13), 303 Wisner Ave., Park Ridge, Ill. Mary H. Sandford, Long Lane

Hampton Bays, L.I., N.Y.

Woody Struthers, 132 Grand-

view Ave., Rye, N. Y. Mrs. Pearl B. Still, Due West,

Mrs. W. L. (Iris) Harrison, Rt. 1, Box 165, Gr veton,

Doug Hanson, P. O. Box 24, Main St., Bolton, Mass.

Mr. & Mrs. Charles Harter. 182 S. Prospect St., Spencerport, N. Y. Fred J. Call, Jamesport, Mo.

Patrick J. Shinners, 5999-28th St., N., St. Petersburg, Fla. Vernon L. Sawyer, 13½ Sen-tinel, Road Lake Placid, N.Y.

Stephen T. Watson, 90 N. Bengal Rd., Cherokee Park, Metaire, La.

# WANT TO BUY - MINERAL COLLECTIONS

PREFER OLD SPECIMENS, TOP QUALITY MINERALS, NO JUNK PLEASE.

# Commercial Minerals Corp.

**BEST PRICES PAID** 

22 WEST 48 th ST.

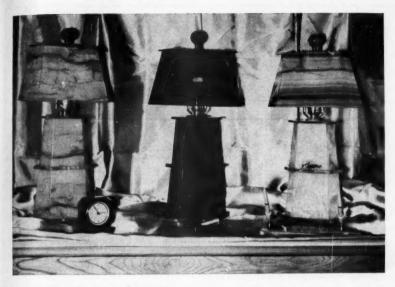
**NEW YORK 36, N.Y.** 

## Covington Lapidary Engineering Corp. Awards Prize and Plaque

We are indebted to the Covington Lapidary Engineering Corp. of First and Hi-Way 99, Redlands, Calif., for the two fine photos furnished us for publication. Covington Lapidary has the World's most complete lapidary equipment line and was one of the donors of awards at the American Gem Show, Long Beach, Calif., Aug. 29-31, 1960.



Mr. Covington, (right) presenting the Covington Master Lapidary Award to the winner, Cash Cox of the Compton Gem & Mineral Club, Inc., Compton, Calif. The award consisted of a trim saw complete with blade and motor and a plaque. It was presented at the American Gem Show, Long Beach, California, August 29-30-31, 1960 (see other photo.)



The prize winning black obsidian lamp is shown in the center along with other pieces of arteraft done by Mr. Cash Cox, (see other photo).

#### POLISHING HEMATITE

You have the right answer to all good things. So - will you please jot down the best way to get the best POLISH on hematite or Alaska "diamond" as they are called in gems for sale?

I have some of this material from the far north. I have tried everything I know of and no polish, even when I facet a stone.

> W. Hanson 8743 Strathearn Cresc. Edmonton, Alb., Canada

John Sinkankas "Gem Cutting", p. 317, recommends the following procedure for hematite:

"Hematite is a red oxide of iron and its principal ore. A small quantity is used for cutting intaglio gems and sometimes beads and faceted stones. The material used for this purpose is an exceptionally compact ore which comes principally from Cumberland, England. It is seldom cut in this country because of the difficulty involved and the cheapness of the product. It may be faceted on ordinary equipment and polished with

Linde A on a tin or lead lap. In Germany, it is often polished with magnesium oxide on cloth buffs or laps upon which cloth is stretched. Hematite is very messy to handle, and it is recommended that it be avoided."

#### LIKES VRW COLUMN!

Editor R&M: I like your Visiting Rockhounds Welcome Column. I looked up a number this past sum-mer from Missouri to Montana and had a much better time then I would have if I had not found their names and addresses in R&M. Didn't meet a one I didn't like, which speaks rather well of the rockhound fraternity. Came home loaded with minerals, had a wonderful vacation, traded some, talked a lot, and learned more then I ever expected to know. I'd pay \$3.00 just to meet those folks, knowing them as I do now. Thanks for that, Editor

You have the best mineral magazine in the U.S. for my money. Keep it coming.

James R. Dunn Sec. Independence Gem & Mineral Society, 2940 Stark Ave., Kansas City 29, Mo.

Dec. 15, 1960

## WITH OUR ADVERTISERS

Conducted by James N. Bourne

c /o Rocks and Minerals, Box 29

Peekskill, N. Y.

Advertisers are cordially invited to submit News Items to this Department

The Valley Art Shoppe, 21108 Devonshire St., Chatsworth, Calif., informs us through its owner Norman L. Sumner that they will now operate under the family name 'Sumner's'.

"Since ours is a family run business and to make our name less confusing to everyone, we have decided to change from the Valley Art Shoppe to Sumner's.

"We will continue to carry a complete line of materials from machinery, mountings and fluorescent lamps, to tools and fine crystal specimens. All is the same except the name."

Note: We wish Norman L. Sumner & family continued success under the now to be used name of Sumner's.

Kurth's Jewelry, Hendricks, Minn., is featuring via his ad this issue in R&M, some unusual beautiful black Australian fire opal jewelry imbedded in pure gold, set in 15mm round mountings and handmade. We are told they command that second look. Need we say anymore. Look up their ad this issue in the display section of R&M as to above and other good buys.

From Marvin Hume who operates the Boardwalk Rock & Shell Shop, 1409 Boardwalk, Atlantic City, N. J., and regularly advertises in R&M each issue comes the following:

"As Atlantic City is host to more visitors than any other city in the country, some eighteen million, plans are being made to have an Annual Gem & Mineral Show. With a guaranteed flow of people from all parts of the East, we feel this affair will do more to foster the finest of all hobbies, with apologies to those who have other views."

Note: We agree with Mr. Hume that such a Gem & Mineral Show would be well attended and many new people also would be attracted to the hobby of Mineral collecting, Gem Cutting, etc., from an Annual Show of this type. found

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D. A. Norvell of "Beslabs", P.O. Box 366, Sunland, Calif., currently advertising in R&M the past couple of issues, informs us as to their business policy they wish be known to customers:

"We founded this business with one promise—GIVE THE CUSTOMER A BREAK. Being collectors of the material we offer for sale, as contrasted to the material being purchased, we are able to be choosey about the quality and equally important we have lower material production costs which savings we are glad to pass along to the customer, as our advertisements will attest

As a further example of our effort to carry out our basic promise—With each order we ship, we enclose a little letter thanking the customer and offering a unique service: any Beslab customer who visit our area and wishes to do some collecting is invited to contact us. We will either escort him or furnish full field trip information to help him realize his desire. Also, if the order includes any material which presents an unusual polishing problem, we include a special instruction sheet detailing the best way of working the item."

The Thurstons, of Morningdale (Boylston) Mass., would like to clarify their address seen regularly via their ad in R&M.

"Many friends and collectors have found it difficult to locate us since we have no sign on a numbered road and no means of getting one put up since the nearby property is all residential. Furthermore it is somewhat confusing to see in our ad simple Morningdale, (Boylston) Mass., then to discover that as far as the road maps are concerned Morningdale does not seem to exist. The answer to this is that we are in a section of the town of Boylston, Mass., which is located on Route #70 but through an oddity of mail delivery, letters are delivered direct from the city of Worcester to our own separate post office without going to Boylston. Letters addressed simply Boylston reach us about 12 hours later. Visitors seeking us in Boylston itself may find that we are unknown but by asking for the Morningdale section and going to the local garage or store will have no difficutly." Thank you.

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Peter H. Manuel, of Peters Rocks and Minerals, 1316 East Colfax Ave., Denver 18, Colo., relates that:

"I handle one of a kind specimens and keep away from pound materials, have some very nice minerals such as: olivenite xls on matrix, libethenite xls on matrix, stolzite xls, extra large on quartz, pyromorphite xls, no matrix adhering, very choice. Many other fine specimens also for the advanced and most discriminating collector including hydrozincites that are supposed to be rare in xllization."

Very unusual and attractive crystal groups from Southern Indiana may be purchased through the ads of Harry Sering, 350 South Fenton, Indianapolis, Indiana, from the Jan-Feb and March-April 1961 issues of R&M. These crystal groups consist of transparent to translucent butterscotch colored crystals on very little limestone matrix. Crystals resemble the shape of garnets. All specimens are bright, attractive and scuff free. Also all items are postpaid and guaranteed.

Sergio Del Fava of Astro Lapidary Co., 611 Broadway, New York 12, N.Y., is offering genuine Burma Jadeite rings, highly polished, skillfully cut for \$6.25 each. Also sets of 5 Burmese Jadeite cabochons of yellow, green, red, mauve, and black. Sets are so beautiful they belong in your collection. Comes in 15mm round or 18x13mm oval. Your choice at \$9.75 set. "See our ad this issue for man made diamonds' and other good buys."

Note: Astro Lapidary Co. in recent issues of R&M has offered some very good Moon quartz with a hardness of 7 @ \$4.50 a lb., and some nice morganite (peach beryl) - faceting grade @ 85¢ a gram. Your inquiry may enable you to still make purchase of this material.

J. O. Duguid informs us his new business name will be Rawhide Rock Shop and Museum and the new address will be at South 87, Orin, Wyo.

"The new location provides free overnight camping and trailer space for customers," relates Mr. Duguid.

Note: The Rawhide Rock and Mineral Museum advertises regularly in R&M.

Max Knopf, Pres., Brazil Gems, Inc., 38 W. 57th St., New York 19, N. Y., relates to us the following: "Our place of business is unique in a way as we are a branch of the Amsterdam Gem Cutters of Rio de Janeiro. We import the best specimens from our mines in Brazil and have a showroom in New York where we invite all dealers and private collectors to visit and look around. Our prices are the lowest and everything first hand. Note our ad in R&M this issue."

Roy Snyder's Adirondack Cabins will be open in late April. They are located on Rt. #9, 5 mi. north of Chestertown, N.Y. Phone 2420. Roy informs us that tourmaline, apatite xls., hugite, vesuvianite and labradorite may be found in the area. Trout fishing too and Mr. Snyder is a good guide. So you fishermen and rockhounds better drop in on Roy and see what he has to offer you.

Also on Rt. 9, 3 miles south of Lake George, N.Y., is located The Tepee Trading Post, operated by Sam Frost who offers a wide selection of the finest grades of gem facet rough available. The selection among others include tourmaline, morganite, topaz, apatite, beryl, amethyst, aquamarine etc.

The Tepee Trading Post is a wonderful place to visit for everyone as unusual items may be purchased. A good selection of Indian made material offered to the delight of children and grown-ups alike. Open every day including Sunday.

#### **Dealers Catalogs**

(Continued from page 167)

Minerals Unlimited, 1724 University Ave., Berkeley 3, Calif., recently released their Fine Mineral List (7 pages) featuring many choice specimens this California establishment have added to their large stock. One of their acquisitions is a large collection of Bisbee, Arizona specimens. They also acquired some interesting Japanese minerals as well as many from Europe, Africa and South America. Are you on their mailing list? If not, rush in your name and they will send you this list!

Burminco, 128 S. Encinitas, Monrovia, Calif., have also released a list of fine and interesting minerals for collectors. Their recent price list contains 4 pages with 14 illustrations of some choice minerals that have been added to their stock.

### NEVER LET SUBSCRIPTION EXPIRE!

Editor R&M:

Please never let my subscription expire unless I notify you. I don't want to be without R&M.

Miss Marion E. Brazeau 835 Wavely Place Utica 4, N. Y.

To Help Us Introduce Our New Shop Name, We Are Offering

## Calcite xl Groups from Mexico

#### SUMNER'S

21108 Devonshire St., Chatsworth, Calif. formerly Valley Art Shoppe

"All is the same-except the name"

#### FREE SPECIMENS, but must call for them!

Editor R&M:

As before, I have a large supply of rocks & minerals suitable for novices only. I will be happy to give to anyone who calls a large selection. Suggest an appointment. As before, no string's attached. Nothing to sell. No mail requests please.

Charlie Bennett 210 W. Franklin

TRI-STATE ROCKHOUNDERS

We had our election of officers for 1961 who are as follows: Dr. George Size, Murphy, N. C., President; Jack Powell, Franklin, N.C., Vice-Pres.; George Hicks, Andrews, N.C., Treasurer; Mrs. R. E. Russell, Chattanooga, Tenn., Rec. Sec.; H. B. Estes, Brasstown, N.C., Corres. Sec.

We have two secretaries, the reason is that we want Brasstown, N. C., to be the mailing address as Brasstown is the home of our club. The past year we retired the mortgage on our building and the Tri-State Rochounds now officially own their own clubhouse of

now officially own their own clubhouse of which we are very proud.

Our meeting night is the first Saturday night of each month and if any rockhounds are in the vicinity, we would be most happy if they would visit us.

H. B. Estes, Corres. Sec. Brasstown, N. C.

Horseheads, N. Y.

Experimenting with Minerals (Continued from page 166)

erals as to their composition and structure. This can become either a wonderful hobby or one's vocation.

Richard Hansen is 15 years old and has collected rocks since he was 11. He has won a blue ribbon and a purple ribbon (best in his division) for his collection of Minerals at the Northwest Federation Show in 1958.

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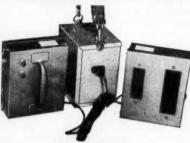
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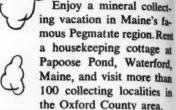
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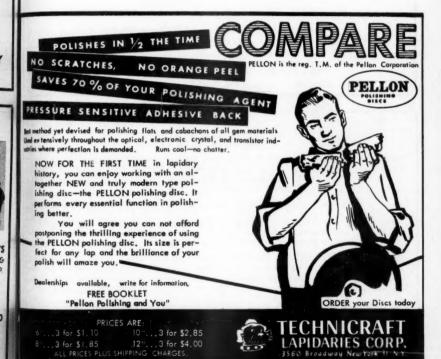
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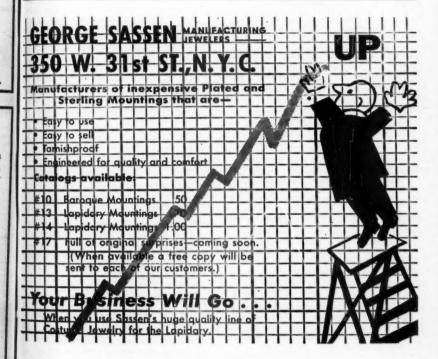
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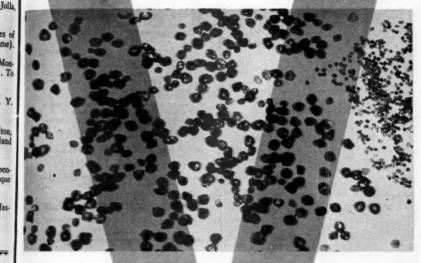
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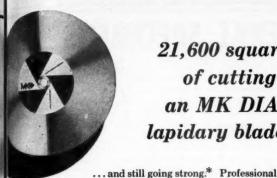


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